

The background of the image is a repeating pattern of stylized green vines and leaves. The vines are thin, curved lines that form a network across the page. The leaves are solid green, teardrop-shaped, and are attached to the vines at various points. The overall effect is a fresh, organic, and modern aesthetic.

# **INVESTMENT GUIDE FOR AGRICULTURAL SECTOR OF KARAMAN**



# INVESTMENT GUIDE FOR AGRICULTURAL SECTOR OF KARAMAN

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## CONTENTS

<b>PREFACE.....</b>	<b>1</b>
<b>INTRODUCTION.....</b>	<b>3</b>
<b>SOCIO-ECONOMIC STATUS OF KARAMAN.....</b>	<b>5</b>
<b>PRESENT STATUS ANALYSIS OF AGRICULTURAL SECTOR.....</b>	<b>13</b>
<b>AGRICULTURAL INDUSTRY IN KARAMAN.....</b>	<b>15</b>
<b>AGRICULTURAL BUSINESS IN KARAMAN.....</b>	<b>16</b>
AGRICULTURAL MARKETING SYSTEM.....	17
EXPORT.....	19
MARKETING PROBLEMS AND SOLUTION PROPOSALS.....	21
<b>FOUNDATIONS SUPPORTING AGRICULTURE IN KARAMAN AND PROVIDED SERVICES.....</b>	<b>26</b>
AGENCY OF T.R. PRIME MINISTER INVESTMENT SUPPORT AND PUBLICITY (ISPA).....	26
MEVLANA DEVELOPMENT AGENCY (MDA).....	26
DEPARTMENT OF FOOD, AGRICULTURE AND LIVESTOCK OF KARAMAN (DFAL).....	26
KARAMAN CITY COORDINATOR OF AGRICULTURE AND RURAL DEVELOPMENT SUPPORT INSTITUTION (ARDSI).....	27
KOP REGIONAL DEVELOPMENT ADMINISTRATION.....	27
SMALL AND MEDIUM ENTERPRISES (SME) DEVELOPMENT ORGANIZATION DEPARTMENT OF KARAMAN (KOSGEB).....	27
KARAMAN COMMODITY EXCHANGE (KCE).....	27
<b>PRESENT SUPPORTS AND DONATIONS FOR AGRICULTURAL INVESTMENT IN KARAMAN.....</b>	<b>28</b>
PAYMENTS OF AGRICULTURAL SUPPORTS.....	28
INVESTMENT SUPPORTS.....	29
GENERAL INDUCEMENT SYSTEM.....	31
REGIONAL INDUCEMENTS.....	32
SUPPORT PROGRAM OF RURAL DEVELOPMENT INVESTMENT.....	36
GRANT SUPPORTS OF EUROPEAN UNIONS INCLUSIVE TO IPARD.....	38
<b>TEN REASONS FOR INVESTING TO AGRICULTURE IN KARAMAN.....</b>	<b>43</b>
<b>INTRODUCTION OF INVESTMENT AREAS.....</b>	<b>49</b>
CROP PRODUCTION.....	49
FIELD CROPS.....	52
CEREALS.....	56



LEGUMES.....	58
INDUSTRIAL CROPS.....	60
OIL CROPS.....	60
FODDER CROPS.....	62
MEDICINAL AND AROMATIC CROPS.....	63
SEED PRODUCTION.....	64
HORTICULTURE.....	67
FRUIT GROWING.....	69
VITICULTURE.....	76
VEGETABLE PRODUCTION.....	79
GREENHOUSE FARMING.....	83
ORGANIC FARMING.....	84
ANIMAL HUSBANDRY.....	86
SMALL RUMINANT HUSBANDRY.....	87
CATTLE HUSBANDRY.....	90
POULTRY FARMING.....	94
APICULTURE.....	95
AQUACULTURE PRODUCTS.....	96
AGRICULTURAL MECHANIZATION.....	97
AGRICULTURAL EQUIPMENTS AND MACHINES.....	97
PRESSURED IRRIGATION SYSTEMS.....	100
POSSIBILITIES OF USING NEW AGRICULTURAL TECHNOLOGIES.....	103
<b>OFFERABLE GOVERNMENTAL PROPERTIES FOR INVESTORS IN KARAMAN.....</b>	<b>104</b>
<b>COMMUNICATION INFORMATIONS.....</b>	<b>108</b>
<b>PROGRAM AND PROJECTS CONDUCTED IN KARAMAN.....</b>	<b>112</b>
<b>CONCLUSION.....</b>	<b>114</b>





## PREFACE

Agricultural sector has incurred important responsibilities in social and economic developments of Turkey. Providing the food needs of growing population is only possible by increasing yields of main food crops due to impossibility of widening the planting areas. Moreover, demand towards safe food has been steadily increased even though too many technological developments have occurred.

One of the most important indicators of being developed for our country is the status of agricultural sector. It is seen that countries have faster and more stable economic developments if they have strong and sustainable agriculture supported by modern techniques. In this respect, stable developments in agriculture have been obtained in Turkey due to efforts of structural changes and supports given by the Ministry of Food, Agriculture and Livestock. Department of Agriculture, Food and Livestock of Karaman is trying to use agricultural capacity better, to increase production quality and standards and to make agriculture more sustainable.



Karaman provides important opportunities to investors with its fast developing strong industry and variability of agricultural activities. Karaman is also an important investment area because of its young and quality human resources, strategic location, wide land properties, suitable ecology, strong agricultural industry, organic farming potential, good climatic conditions for seed production, capacity of growing high quality and yielding cereals, potential of modern horticulture production, potential of modern animal husbandry, inducements for rural development projects, supports and exemptions.

An agricultural investment plan that is used to save natural resources with developing technology and scientific improvements will increase incomes of farmers and will make high quality production possible. Karaman has renewable energy resurces which can provide enough energy for agricultural activities especially for irrigation. We support studies on effective use of these energy resources. In addition, we also support all investment and projects run to improve agriculture and animal husbandry in Karaman.

With my pleasure, I invite all possible investors to make investments to Karaman for realizing the value of opportunities offered by our city based on information given in this Investment Guide for Agricultural Sector of Karaman.

In this respect, I thank to academicians prepared this investment guide which will help development of agricultural sector, and I also thank to personal of the Department of Agriculture, Food and Livestock of Karaman and other connected people.

**Murat KOCA**  
Governor





## INTRODUCTION

Agriculture is the oldest business and investment tool human beings know. Human beings always tried to find ways of getting endless needs of themselves, and today borders in consumption became vague. Through the development of humans, the most important factor of nourishment has been food demand. This is something that will never change even though technology and civilization improve so much or not. Safe food production systems are required to obtain demands for food in recent years because of increase in the number of conscious consumers. Therefore, it must be explained that which products are produced for which reason and when by farmers or producers and what types of processes are used in the production steps. In recent years, global changes that affect countries and people in increasing rates and growing world population with its safe food needs have made agriculture as an important strategic sector. It is not possible to expect that that industry and technological developments would not affect agriculture. Due to the fact that traditional production systems have resulted, industry depending upon agriculture has developed very fast. Therefore, agriculture has become a



left their role to intensive production models, interest of investors and enterprisers to agriculture has been increased and as amodern and professional business in whole world by going out of small farming activities run in rural areas or in small villages as small-scale family business.

We are responsible of obtaining food needs of our citizens because there is no possibility of widening agricultural lands. This is only possible by producing more and high yielding products on present agricultural lands. On the other hand, producing more and high yielding products is only possible with more professional and analysable production methods. It is also not possible to consider Karaman out of agricultural developments occured in Turkey and world in recent years. In this context, assessment of Karaman's agricultural potential and natural resources in a best way is important for Karaman to get its place in agricultural sector it deserves. Investments made in agricultural sector are also very important to determine the city's agricultural potential, to highlight its strong sides and to provide sustainable production.

Therefore, preparation of a guide is required to smooth the way of investors for using limited funds and natural resources better and for providing them a new perspectives. Agriculture is practiced on 346.848 ha of totally 885.100 ha area in Karaman, and it has an important potential in the production of horticulture, cereals and legumes. Presence of suitable pasture lands for animal husbandry and strong infrastructure along with project carried out in the animal sector will attract investors' interests. In addition, Karaman provides good opportunities for investors with its good climatic conditions, geografic location, young and dynamic population, agricultural product variability, historical and cultural richness. Other important points that investors should take into consideration are public investment amounts increased with conducted projects in Karaman in recent years and strong trade infrastructure.

It is very important for us as the Department of Food, Agriculture and Livestock of Karaman to transfer our experiences to the sector under scientific point of view and to help them for having new perspectives. For this reason, I believe “Investment Guide for Agricultural Sector of Karaman” prepared through a cooperation with our Department and Karamanoğlu Mehmetbey University will help investors to make new investments in the city. I deeply thank to our Governor Murat KOCA for his support in the preparation of this guide and our other activities, to civil organizations working very hard for development of the sector, and academicians of Karamanoğlu Mehmetbey University and my colleagues for their efforts. And finally, I invite all investors to make investments in the sector in Karaman. Respectfully yours...

**Mehmet ÖZTİRYAKI**

Director

Department of Food, Agriculture and  
Livestock of Karaman



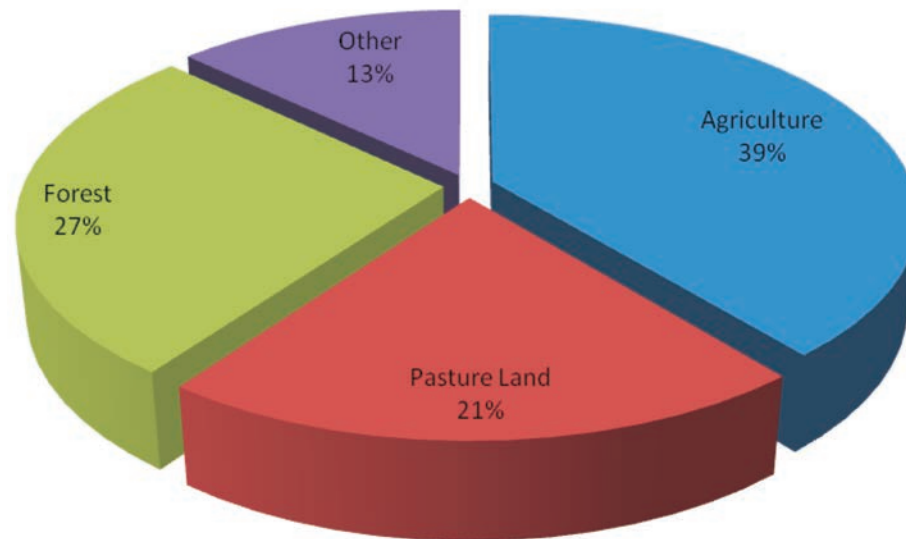
## SOCIO-ECONOMIC STATUS of KARAMAN

Karaman is located between 36°26' and 33°39' north latitudes and 32°27' and 34°09' east longitudes. Larger part of it is in the Central Anatolia while the rest is in the Mediterranean Region, and it has a very reach history and cultural background. Karaman which became into a city in 1989 has six towns including central town and ten townships and 160 villages. 107 of these villages are in forests. Ayrancı, Başyayla, Ermenek, Kazımkarabekir, Sarıveliler are the towns of Karaman addition to the central town. Total area of the city is 885.100 ha. The largest town of Karaman is the central town.

According to the Agriculture Directorate of Karaman, agriculture is practiced on 346.848 ha of totally 885.100 ha area while 187.115 ha of it is pasture land and 241.152 ha is forest. Percentages of this classification is given in Figure 1. Terrestrial climate is seen at most part of Karaman. Summers are hot and dry while winters are cold and mostly rainy or snowy. Long term average of rain in Karaman is 332,5 mm. This indicates that Karaman is one of the most arid areas of Turkey.







**Figure 1.** Distribution of lands in Karaman

Karaman has been an important settlement since more than 10.000 years because of its geographic, cultural and historical properties. Altitude of Karaman is 1.033 m and has neighbours as Ereğli (Konya) in the east, Antalya in the west, Konya in the north and Mersin in the south (Figure 2). Therefore, Karaman is a typical transitional area between Mediterranean and Central Anatolia. Karaman has two valleys namely Karaman and Ayrancı which have about

1.000-1.500 m altitudes and are available to grow field crops and horticulture. Also, there are several plateaus with microclimatic conditions on the Middle Taurus Mountains. Therefore, with its very special climatic conditions, Karaman hosts many wild or endemic plants, animals or other living creatures.





**Figure 2.** Location of Karaman in the city map of Turkey.

Karaman is an important city for its geographic location, agriculture and industrial activities. It has an important position in terms of cereal and legume production. In addition, Karaman takes a position of being a center for fruit production , especially apple production. Economical activities of Karaman are not only consisted of agriculture and animal husbandry but also industry and trading. Karaman has many small and big industrial zones, and this makes Karaman one of the cities having important economical infrastructure. Karaman especially has an important place in the production of flour, biscuit, wafer and bulgur.

Karaman provides one third of total biscuit production of Turkey and one fifth of bulgur. Based on 2013 statistics, 136 milion dolar import and 332 milion dolar export were done in Karaman (TUIK 2013). This indicates the support of industry to the city's economy.

Fast developments in the industry based on agricultural production has changed the socioeconomic status of the city and speeded up moving from villages to the city center. It should be considered seriously that if this moving continues as being, there will be little people left in the villages which put agriculture into risk.





Population of Karaman lives mostly in the town/city centers (70.89 %) while only 29.10 % lives in the villages. Population of the city center itself has increased steadily and reached up to 60.10 %. Total population of Karaman has reached up to 237.939 person by increasing 1.06 % from the last year's number (TUIK 2013). If Karaman is analyzed in terms of employment based on 2012 data, participation to labor force is 50.5 %, unemployment rate is 4.9 % and employment rate is 48.0 % (Table 1). Unemployment rate is almost half of Turkey in general. Moreover, employment rate and participation to labor force are higher too. It is not forgotten that industry has positive effects on these results.

**Table 1.** Employment and unemployment rates in Karaman and Turkey

	2011			2012		
	Unemployment Rate %	Employment Rate %	Participation to labor force %	Unemployment Rate %	Employment Rate %	Participation to labor force %
Karaman	5,7	48,7	51,06	4,9	48,0	50,5
Turkey	9,8	45,0	49,9	9,2	45,4	50,0

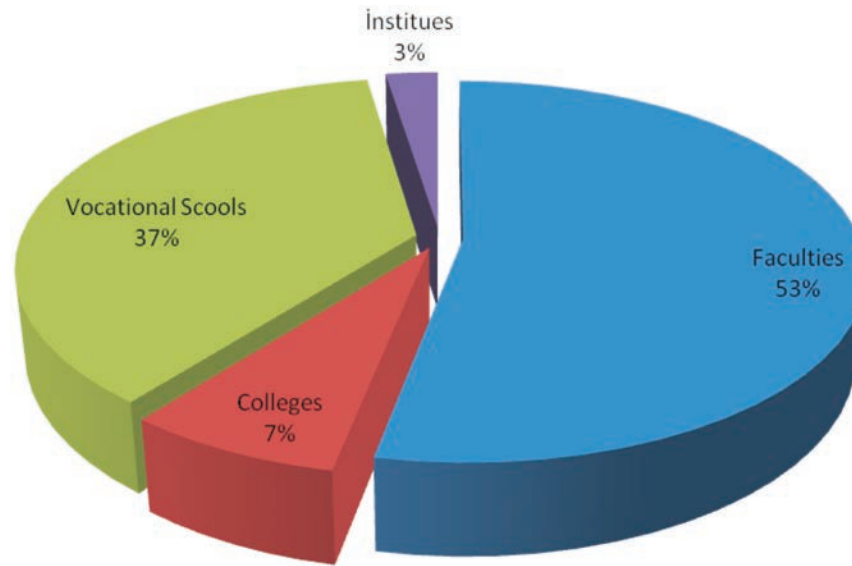
**Source:** TUIK 2012



Important investments for education have been done in Karaman as well. The city is at a very good standing in terms of number of schools and students. There are 2.701 classes in total based on the 2013 data given by the City Directorate of National Education. 208 of them is for preschool, 877 for primary school, 539 for high school, 456 for technical high school, 7 for apprenticeship school and 21 for public education center. Total student number is 63.765. In addition, there is an university, Karamanoğlu Mehmetbey University, established in 2007. Totally 9.912 students are educated in the university at six faculties, two colleges, five vocational schools and two institutes (KMU December 2013 data). From these students, 5.296 of them (53.16%) are in the faculties, 736 (7.43%) in the colleges, 3.660 (36.92%) in the vocational schools and 247 (2.49%) in the institutes (Figure 3).





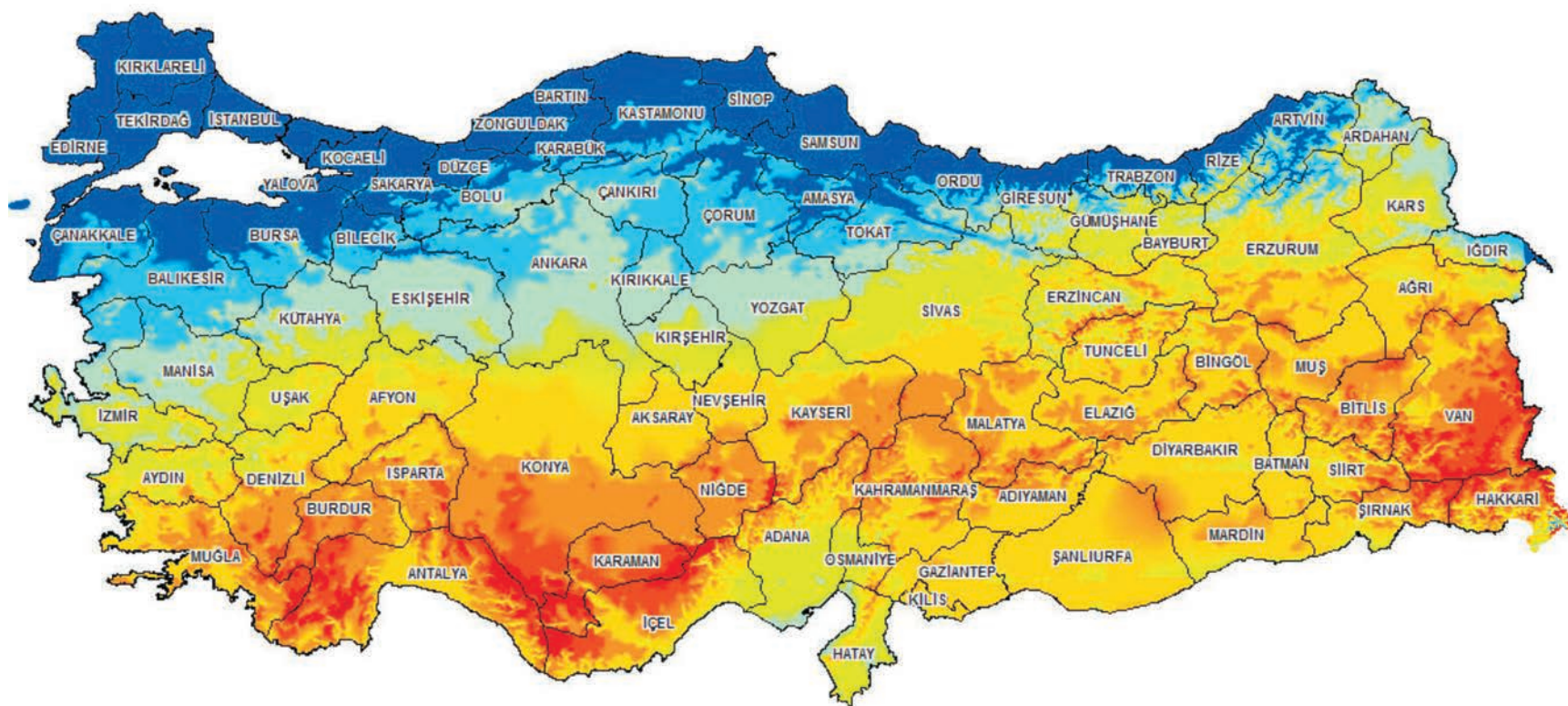


**Figure 3.** Distribution rates of students in Karamanoğlu Mehmetbey University

Another advantage of Karaman for investing is its high potential for energy resources. As seen in Turkey's sun energy map (Figure 4), Karaman is on the belt of the highest sun radiation. According to the map, Karaman has a potential of 1.650 kWh/kWp per year which is higher than the average of Turkey (1.527,5 kWh/kWp). Therefore, Karaman with its flat valleys and low humidity is a very attracting city for energy investments.

Karaman has also a very high potential for wind energy. According to the wind energy map of Turkey, there is 9 m/s wind energy potential in 30 meters in Karaman. Ermenek, Sarıveliler ve Başyayla towns have been determined as suitable regions for establishing wind energy power stations. Total power of these stations has been calculated as 933,6 MW.





**Figure 4.** Sun energy map of Turkey

Karaman has rich coal resources as well as renewable energy resources. Some of coal has already been processed. The most important and biggest coal mine in the borders of Karaman is Karaman-Ayrancı lignite mine with 1 billion 832 million capacity. A thermal power plant will be built in Ayrancı to process this mine and approximately 8 billion dollars will be spent for investments in total. One other underground resource is the lignite mine in Ermenek and it has about 8 million tons of coal.



Karaman is poor for above ground water resources but rich for under ground water resources. Above ground water resources of Karaman is shown in Table 2 and 3.

**Table 2.** The potential of above ground water of Karaman (ha)

Natural Lakes	Reservoir of Dam Spaces	Reservoir of Pond Spaces	River Spaces	Total
3.601	920	10	103	4.634

**Source:** TR52 Master Plan for Agriculture of West Anatolia

**Table 3.** Rivers/Creeks of Karaman and water amounts

Rivers/Creeks	(hm3/year)
Göksu River	395
Ermenek Creek	1.141
Gödet Creek	54
İbrala Creek	84
Deli Creek	19
Eski Creek	14
Koca Creek	49
Others	58

**Source:** DSI

The hydrelectric power plant was built in Ermenek with 1.134 GWh capacity and will support irrigation projects. Unconscious and excessive use of under ground water for irrigation has been lowering the water table and consuming water resources very fast. The use of water resources in the region must be planned very carefully due to negative effects of global warming, excessive water usage in irrigation, low relative humidity and soil characteristics of the region.



## PRESENT STATUS ANALYSIS OF AGRICULTURAL SECTOR

Karaman is an important city for its geographic location, agriculture and animal husbandry. Agriculture and animal husbandry are very important for the economy of Karaman with 39.7 % employment in agriculture. About 39 % of total 885.100 ha area of Karaman has been used for agriculture.

Field crops were grown on 62 % of the total agricultural area of Karaman (346.868 ha), fruits were grown on 8.7 % while vegetables and viticulture were grown on 3.9 % and on 1.4 %, respectively. Of this area, about 15 % (52.450 ha) was left for fallow. Field crops were planted on 248.369 ha, fruits and spices were planted on 32.408 ha while 13.890 ha were used for vegetables (TUIK, 2013).

Field crops have an important place in city's agriculture. Mostly grown field crop species in Karaman are wheat, barley, chickpea, corn, dry bean, sun flower, sugar beet and oat. Karaman has an important place in the production of cereals and legumes. Durum wheat were produced on 29 % of cereal grown lands while bread wheat were produced on 20 %, barley on 35 %, corn on 7.7 %, rye on 3.9 % and oat on 3.8 % of this area. Karaman produces 0.5 % of Turkey's total bread wheat production (17.98 million ton) and 3.6 % of total durum wheat production (4.08 million ton) (TUIK, 2013). In addition, it is becoming more important in fruit production, especially in apple production. Mostly grown fruit species in Karaman are apple, pear, cherry and plum. Karaman produces 18.3 % of apples, 2.4 % of pears and 2.4 % of cherries of total fruit production of Turkey. Mostly grown vegetable in Karaman are parsley, green onion, spinach, leek, cabbage and lettuce. Karaman provides 8.9 % of parsley, 7.2 % of green onion and 3.6 % of spinach of total production of Turkey. Green bean, watermelon and muskmelon are vegetables provides about 1.34 % of total production of Turkey.

Karaman is not at the desired level in live animal production and marketing animal products. Karaman was ranked as 63th with 378 million TL for live animal value and as 68th with 100 million TL for animal products value among cities in Turkey (TUIK, 2012).







Economic activities of Karaman depends on industry and trades as well as agriculture and livestock production. Karaman has many small and big industrial zones, and this makes Karaman one of the cities having important economical infrastructure. Karaman especially has an important place in the production of flour, biscuit, wafer and bulgur. 249 different agricultural industrial companies are in business in Karaman. Karaman provides one third of total biscuit production of Turkey and one fifth of bulgur. Based on 2013 statistics, 136 million dolar import and 332 million dolar export were done in Karaman (TUIK 2013). This indicates the support of industry to the city's economy.

## **AGRICULTURAL INDUSTRY IN KARAMAN**

Data related to agricultural industry in Karaman is given in Table 5. Agricultural industrial companies related to cereals, flour and products made of flour are at the first place with 146 companies. Biscuit and cookie companies were 18 and 23, respectively. As understood from the data, industry depending upon cereals is very important in Karaman. While the number of companies having activities on milk and milk products are 19, meat and meat products producing company is only two. Capacity of milk products is very high in the city, however, most of the milk processed in the milk industry are bought from neighbour cities. There are two olive oil producing companies and they process olives gathered from microclimatic areas of the city. There are only three fruits and vegetables packaging, classification, piling and processing companies and this is not enough for Karaman. This area may be an important investment area for companies. Egg and egg products producing company number are 8. Number of other agricultural industrial companies are usually under 10.



**Table 5.** Industrial companies depending upon agriculture in Karaman.

Business Area	Number	Business Area	Number
Production of alcoholic and non-alcoholic beverages	3	Every kinds of cookie products	23
Biscuit, chocolate, cacao and similar products	18	Milk and milk products (including collection centers)	19
Bulgur production	6	Sugar packaging	3
Other food producing companies	4	Candy production	3
Dried food and fruits processing	3	Crushed sesame seeds, pectic and halvah production	5
Different kinds of bread	41	Salt processing	1
Meat and meat products (offal processing companies)	2	Flour production	16
Fermented and saltwatered products	2	Production of foods made of flour	146
Production of materials coming into contact with foods	14	Food packaging	1
Production of cereals and legumes	3	Egg packaging	8
Pasta and semolina production	2	Olive oil production	2
Fruits and vegetables packaging, classification, piling and processing	3		
<b>Total</b>			<b>328</b>

**Kaynak:** Food, Agriculture and Livestock Directorate of Karaman 2013 Working Report

## AGRICULTURAL BUSINESS IN KARAMAN

Karaman is one of important agricultural centers with its agricultural production potential and agricultural industry. Although Karaman draws attention with its export in some particular products, it is especially important in products related to cereals and apple. Business depending upon agriculture will be improved if yield and quality of agricultural products are increased and marketing organizations for agricultural products are developed.



## AGRICULTURAL MARKETING SYSTEM

Agriculture is one of the oldest activities of humanbeing. Although there are differences at certain levels in terms of agricultural economy between countries, it has a vital role on general economy in almost all countries. Agricultural products are also very important for human nutrition. Even though, the rate of agriculture in the general economy has being decreasing in developed countries; nutrition needs, global warming, population increase and protection of genetic sources have made agriculture more important.

Population number of the world will increase about 3 billion in 2050. Based on the 2010 data, cereal production will increase 31 % in 2030 and 52 % in 2050. Similarly, meat production will increase around 34 % and 64 % in 2030 and 2050, respectively. Therefore, pressure on natural resources will heavily increse as well. There are some untouched lands which can be used for agriculture in Brasil only. So, increasing yield per area and rural agricultural practices will become more important in future. Marketing agricultural products are as much important as protection of natural resources and agricultural production.







Office of soil products, trade stock markets, merchants, wholesaler centers and cooperatives are the important actors of agricultural marketing. In addition, producer unions, product stock markets, licenced storages and optional stock markets are also important parts of agricultural marketing in developed countries. The role of similar foundations in agricultural marketing have being increased in Turkey as well.

Whereas public sector has been at the marketing of cereals, tobacco, meat and tea, private sector and cooperatives play important roles at the marketing of broad range products. Wholesale centers are especially important at fruit and vegetable marketing. Rural producers use commis-sionars as marketing agencies.

Producer unions, product stock markets and cooperatives are important foundations for agricultural marketing in developed countries. For example, cooperatives in the European Union have about 80 % market share for fruit and vegetable marketing. Increasing the number of producer unions and cooperatives in Turkey will help better marketing of Turkey will help



better marketing of agricultural products as well as helping education, introduction of new technologies and research and development activities.

There are 79 agricultural cooperatives in Karaman. Of these, 36 are agricultural development cooperatives, 31 are irrigation cooperatives and 12 are agricultural credit cooperatives. There are also two cooperative unions for irrigation and animal husbandry. Based on the law of number 5200, there are also six agricultural producer unions for apple, egg and milk. In addition, three other unions were established for bred cow growers, bee Growers (apiarists) and bred sheep growers according to the law of number 5996 (Department of Food, Agriculture and Livestock of Karaman, 2013).

## **EXPORT**

Export data of Karaman in 2013 is given in Table 6. 14 different products were exported from Karaman in 2013. More than 100.000 eggs and many cereal based products are on top of the export list. Lentil, bean and chickpea are other important export products. Export amount of apple is about 415.000 kg. About 10.000 kg pectic and boiled grape juice were exported as well.

While agricultural product export of Karaman was 4.2 million dollars in 2003, this amount has reached up to 15.3 million dollars in 2013. Quality of products and certification are necessary to increase export from Karaman.





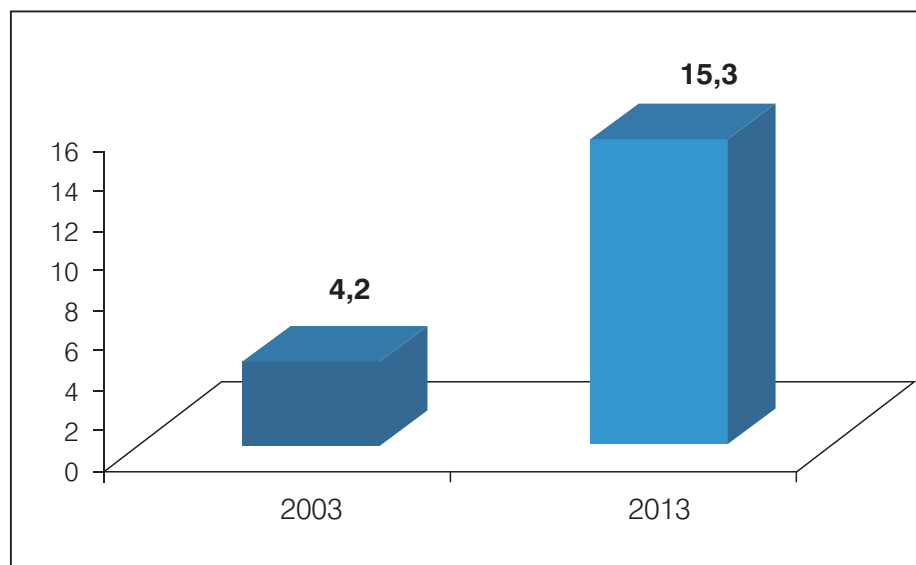
**Table 6.** Export data of some agricultural products of Karaman in 2013

Product	Amount (kg)	Product	Amount (kg)
Egg (number)	100.277.640	Apple	415.464
Bulgur	11.165.835	Rice	330.240
Wheat (grain)	347.675	Lentil	813.240
Pasta	487.510	Bean	328.626
Noodle	23.400	Chickpea	180.650
Semolina	4.000	Crushed Sesame seed	11.050
Oil corn	7.800	Pectic	9.320
Biscuit	47.587.179		

**Source:** 2013 data of Trade and Industry Union of Karaman.

Chapter Code	Chapter Code
<b>4</b>	Milk, eggs, honey and other animal products
<b>7</b>	Vegetables, roots
<b>8</b>	Fruits
<b>10</b>	Cereals
<b>11</b>	Milling products, malt, starch, wheat
<b>15</b>	Oil, butter, candle
<b>17</b>	Sugar and sugar products
<b>20</b>	Vegetables, fruits residuals
<b>21</b>	Coffe extracts, tea extracts, yeast, suace, diet
<b>22</b>	Beverage, Spirints and vinegar





**Figure 5.** Cash value of export in Karaman (Million dollars).

## MARKETING PROBLEMS AND SOLUTION PROPOSALS

Agricultural marketing is whole activities from production to selling. Agricultural marketing is not just a selling but also it is an activity of increasing the value of products by marketing them in the right time and positions. Elements of marketing include products, price, distribution and presentation. There are some differences between industrial products and agricultural products in terms of marketing.

Marketing elements mentioned above are controled by industrial companies not by farmers. Marketing strategies also show differences from industrial marketing. Agricultural companies or farms have usually small lands and established for growing certain plant species. Products gathered from these small farms contain usually similar plants and they are marketed without any processing after harvest. It is very difficult to obtain an advantage over other farms by having a product that others do not produce. Another factor which differentiates agricultural establishments from industrial companies is the distance between farmers and consumers. Products are usually marketed by retailers.



Marketing problems encountered in Turkey can be underlined as: number and kinds of processed agricultural products are not too many, number of distributor companies are not enough, agricultural planning is usually based on previous years' prices, prices for consumers are generally high, there are so many commissioner in marketing agricultural products, processing quality is usually not high while prices are high, producers are not represented enough and export potential is not used sufficiently. In addition to all these factors, inadequate organizations of growers may be the most important problem. Therefore, informing growers about these issues and organizing them for production and marketing can help to solve marketin problems.

Solutions for marketing can be considered under two main titles. First, agricultural products which are suitable to environmental conditions of the region must be produced as big parties with high quality standarts. Second, organizations and marketing strategies must be developed to sell agricultural products in national and international markets.

Production step is very important in agricultural marketing. Firstly, targeted product must be produced at big quantities and supplied to market with good quality. Karaman has succeded this in apple. Production amount of apple is enoughly big to atract wholesalers and retailers.

Research and development activities are very important in high quality production. These activities provide new or developed products and varieties for growers. Licensed storages are also important in marketing. They may store agricultural products in adequate conditions for longer times and may supply products with standardized quality for consumers and agricultural industry. In addition to this, in marketing of high quality agricultural products, producer unions, product stock markets and cooperatives have importance as well. These organizations may help growers and producers in planning and marketing. Professional support for these organizations must be obtained to succeed.

One of the most important strategies in agricultural production is to grow plant species suited to the environmental conditions of the region. Quality properties of these species must be developed and produced in big quantities. Apple, durum wheat and sheep can be examples for Karaman.

In recent years, changes in nutrition and interest towards healthy foods have increased due to developments in living standarts. In this respect, organic farming, fine-farming practices and product quality standarts have become more important for humanbeings. Therefore, use of these approaches in Karaman will also develop the city's agriculture and marketing of agricultural products.





Confidence feeling is an essential element in establishment of a brand. Being well-known, on the other hand, is an essential element of establishing confidence. Therefore, advertisements are very important for the both issues. In addition, standards of products, traceability of production steps, informing consumers and sensibility to environmental issues are very important in establishing confidence to brands of agricultural products.

Establishment of a brand for agricultural products is not an easy process because it is difficult to form difference between products. Brand value is usually a result of consumer satisfaction and geographic specifications of the product. Especially, traditional products are important for establishing new brands. Geographic signs used in these products help introduction of region as well. Karaman has a potential of having these types of agricultural products because of its specific geographic conditions. Registration of traditional and/or regional products of Karaman will increase the brand value of Karaman.





One other important issue in the world is biofortification of foods, and this subject is one of the most up to date research areas. Especially, developing biofortified seeds in terms of enrichment for microelements such as zinc, ferrum and selenium and increased digestibility is the mostly studied approach. Developing biofortified crop species grown in Karaman region may help marketing the products abroad and establishing well-known brands.

Rural development is very important for agricultural production and marketing. Pressure on food resources is increasing each day due to the increase in population of the world. Therefore, significant amount of investments have been done for rural development in the world to sustain agricultural activities and provide confort for the people living in villages. This may help to remove pressure on agricultural production and to market products more consciously.







Contractual production model is another method for reducing marketing problem. With this approach, farmers produce what industry wants and and sell their products easily. Online marketing is another approach for agricultural marketing, especially for processed products. Therefore, producers should be informed about this new marketing strategy and help them to increase their product standards.

## **FOUNDATIONS SUPPORTING AGRICULTURE IN KARAMAN AND PROVIDED SERVICES**

### **AGENCY OF T.R. PRIME MINISTER INVESTMENT SUPPORT AND PUBLICITY (ISPA)**

ISPA is an organization directly connected with the Office of Prime Minister and has a responsibility of introducing governmental investment supports to global business world and helping them in every stage of investment efforts. The investment agency services as a reference point for international investors by organizing national or regional official offices during the evaluation of investment opportunities. Main services provided by the agency can be ordered as market searching and analysis, reporting of industry and sector, evaluation of investment conditions, area selection, possible consortium or finding possible partnerships, helping for connection with related official offices, helping for legal process and easing the legislative operations, business establishment, inducement applications, obtaining licenses, working/residence permits.

### **MEVLANA DEVELOPMENT AGENCY (MDA)**

MDA is one of 26 development agencies established by decision of Ministers Committee of Turkey. MDA aims to improve relations between public sector, private sector and civil organizations, to decrease differences between developed and undeveloped regions and to provide sustainable and competitive economy in the region. MDA operates in TR52 Level 2 region containing Konya and Karaman. MDA also provide services for international investors to make investments in the region as well as local investors.

### **DEPARTMENT OF FOOD, AGRICULTURE AND LIVESTOCK OF KARAMAN (DFAL)**

DFAL of Karaman helps producers in all subjects related to agriculture. It has five subdepartment in the towns of Karaman. It also works to improve agricultural potential of Karaman and supports farmers in their business. DFAL of Karaman conducts several projects with MDA and other agencies and unions for development of city's agriculture and improvement of farmers.



## **KARAMAN CITY COORDINATOR OF AGRICULTURE AND RURAL DEVELOPMENT SUPPORT INSTITUTION (ARDSI)**

ARDSI were established for contributing to national development by effectively delivering funds provided by the EU and national sources to the target group pursuant to rural development programmes. Its vision can be summarized as being nationally and internationally respected, determining, leading and reliable in implementing rural development programmes with the robust institutional capacity. ARDSI gives support to milk and meat producing agricultural companies for processing and marketing of products, to water companies for processing and marketing, to farms for diversifying agricultural products, to local investors for improving local products and microbusinesses, to rural tourism businesses and to fish companies for improving culture fish production.

## **KOP REGIONAL DEVELOPMENT ADMINISTRATION**

The aims of KOP can be summarized as coordinating project applications in the region, making research, planning and programming to improve regional development efforts. It is one of the most important regional development projects applied in Turkey. This project is practiced in Konya, Karaman, Aksaray and Niğde and takes in 8,5 % of Turkey's total areas.

## **SMALL AND MEDIUM ENTERPRISES (SME) DEVELOPMENT ORGANIZATION DEPARTMENT OF KARAMAN (KOSGEB)**

KOSGEB is a public organization which was established in 1990 in accordance with the Law No. 3624 in order to develop the positions of Manufacturing Industry Enterprises within the economy. SME sectors, development of which KOSGEB is responsible for, was determined with the Council of Ministers' Decision and covers almost all SME activities including agricultural businesses.

## **KARAMAN COMMODITY EXCHANGE (KCE)**

KCE was established in 1984 in accordance with the Law No. 5174 in order to market farmers' products. KCE does everything related to exchanging such as selling products through auctions. It also informs farmers about prices and other economical issues related to products specific to region or season through newspapers, fax, e-mail etc.



## PRESENT SUPPORTS AND DONATIONS FOR AGRICULTURAL INVESTMENT IN KARAMAN

Various agricultural supports and donations are given by Turkish Government to increase agricultural production, to protect environment, to increase yield and export of agricultural products and to increase the farmers' income. Karaman has been at the second region in governmental support system and gets support based on this rating.

### PAYMENTS OF AGRICULTURAL SUPPORTS

56.2 million TL cash support has been given to farmers in Karaman in 2012. Agricultural support amounts for plant and animal production between 2010 and 2012 is given in Table 7 and 8.

**Table 7.** Support amount for plant production (thousand TL)

Support subject	2010	2011	2012
Diesel	5.491	6.019	6.310
Chemical fertilizer	6.581	7.286	7.524
Certified seed usage	358	681	447
Certified seedling usage	673	714	1.126
Premium for cereals and legumes	13.090	11.679	7.275
Premium for oil seeds	1.791	4.240	7.298
Drought and freezing	4.119	0	0
Soil analysis	787	1.064	1.328
ÇATAK support	1.933	2.154	2.909
ÇATAK Equipment and machines	0	192	420
Organic agriculture	18	47	31
Fine-agriculture	74	115	195
Agricultural dissemination and information	9	25	0
Donation of equipment and machines	982	2.687	657
Biological fighting	0	1	0
Total	<b>35.906</b>	<b>36.904</b>	<b>35.520</b>



**Table 8.** Support amount for animal production (thousand TL)

Support subject	2010	2011	2012
Fodder plants	1.786	1.878	1.657
Milk	1.591	2.857	3.811
Milk powder	0	0	2.277
Aquaculture products	638	1.149	749
Calf support	221	449	527
Vaccines (Brucellosi-smack)	91	94	0
Vaccines (Brucella Rev-1 )	0	209	0
Beehives	197	276	316
Sheep-goat	2.395	3.905	4.947
Mature cattle	2.339	3.380	4.129
Feeding	0	261	1.310
Buffalo	0	8	0
Project of animal in farmers cond.	0	334	1.007
Implemented vaccines	0	50	0
<b>Total</b>	<b>9.256</b>	<b>14.850</b>	<b>20.730</b>

## INVESTMENT SUPPORTS

**APPLICATOR:** MINISTRY of ECONOMY, General Directorate of Foreign Capital and Support Application

### GENERAL EXPLANATIONS

#### Related Legislation

- Decision about State Supports in Investments” which was published on the Official Newspaper dated 06.19.2012 and numbered 28.328
- “Regulation on The Use of Decision about State Supports in Investments” which was published on the Official Newspaper dated 06.20.2012 and numbered 28.329 (Number: 2012/1)







### **Fixed Investment Amount and Minimum Capacity**

- Minimum fixed investment amount for benefiting from investment components must be one millin TL in the 1st and 2nd regions while it must be 500.000 TL in the 3rd, 4th, 5th and 6th regions. Additionally, investments should meet with minimum capacity and fixed investment amount and other requirements.

- In financial rental investments, total amount of equipments and machines must be 200.000 TL for each finanacial renting company.

- The rate of intangible things (brand, licence, know-how etc.) must not exceed 50 % of fixed investment amount on the inducement document.

### **Application**

- Application for inducement document is done to Ministry of Economy. However, application can be done to local authorities if fixed investment amount is not exceed 10.000.000 TL and if it is among general inducement practices.

### **Inducement Document**

- Project must be accepted and an inducement document must be filled out for investments to get support.

### **Getting Other Supports**

- If an investor gets a support from this source, he/she can not apply other support programs.

### **Evaluation of Agricultural Sector**

- Investors of agricultural sectors can apply for “General Inducement System” and “Regional Inducements”.

## **GENERAL INDUCEMENT SYSTEM**

» Without any regional differentiation, agricultural investors having fixed investment amount and obtaining other inducement requirements may apply for

- Exemption for custom tax
- Exemption from KDV

» Additionally, if it is required by the investors applying for regional inducement system, an application form for general inducement can be filled out.



### Investments which can not be supported based on general inducement system

- Flour, semolina (except pasta production, integrated wheat and corn semolina production), feed (except fish flour, fish fat, integrated fish and animal feed production), starch and starch based sugar
- Food companies servicing meals
- Cubic sugar
- Greenhouse investments under 5 da
- Crop production (except greenhouse investments above 5 da, cultural mushroom growing and feed crops growing in integrated livestock farms)
- Livestock investments except integrated livestock farms
- Milk processing companies under 5 ton/day production capacity

### Investment areas which their inducement depends to certain conditions

- Integrated great cattle growing investment for milk (minimum 150 cattle)
- Integrated great cattle growing investment for meat (minimum 150 cattle)
- Integrated stud great cattle growing investment for milk and meat (minimum 150 cattle per growing season)
- Integrated poultry investment (100.000 poultry per season)
- Integrated small cattle (sheep / goat) growing investment for milk and meat (minimum 1000 small cattle per growing season)

## REGIONAL INDUCEMENTS

### Agricultural Sectors Induced in The Scope of Regional Inducements in Karaman

INDUCED SECTORS	Minimum Investment Amount
Integrated animal growing investments (including stud animals) *	500 Thousand TL
Food and beverage production**	1 Million TL
Aquaculture products growing (including juvenile fishes and fish eggs)	500 Thousand TL
Cold storage room services	1.000 square meter
Licenced storage	1 Million TL
Greenhouse	20 Da

\*Requirements are as following: Integrated great cattle growing investment for milk (minimum 300 cattle), Integrated great cattle growing investment for meat (minimum 500 cattle), Integrated stud great cattle growing investment for milk and meat (minimum 300 cattle per growing season), Integrated small cattle (sheep / goat) growing investment for milk and meat (minimum 1000 small cattle per growing season), Integrated poultry investment (200.000 poultry per season). There is no required limit for stud poultry growing.



\*\*Products or activities mentioned as following can not get regional inducements: pasta production, pasta related semolina investments, noodle, couscous, sweet pastry, rice, feeding food for pets, fish flour, fish fat, fish food, bread, alcoholic beverages, dried fruits, pickles, linter cotton, tea, nut breaking/roasting, industrially-made soup and meat stock, cereal and legume classification and packaging.

### Regional Inducement Entries in Karaman

INDUCEMENT ENTRIES	Inducements started up to 12.31.2013	Inducements starting from 01.01.2014
<b>Exemption from custom tax</b>	Inducable investments in all sectors	
<b>Exemption from KDV</b>	Inducable investments in all sectors	
<b>Tax cut</b>		
Support rate in investment (%)	25	20
Tax cut rate (%)	60	50
<b>Employer ration of insurance premium</b>		
Application time of inducement	5 year	3 year
Rate of inducement to fixed investment (%)	20	20
Area allocation for investment	Inducable investments in all sectors	
<b>Interest Inducement</b>		
TL Credit	3 point	3 point
Foreign-currency loan credit	1 point	1 point

### EXPLANATIONS ABOUT REGIONAL INDUCEMENT ENTRIES

**Exemption From Custom Tax:** Machines and equipments getting through inducement from national or international sources are exempt from custom tax based on related regulations.

**Exemption from KDV:** According to number 3065 KDV Legislation, machines and equipments getting through inducement from national or international sources are exempt from KDV.

**Tax Cut:** According to item 32/A of number 5520 Corporation Tax Legislation, it is the rate of tax cut applied to corporation tax or income tax up to support amount of investment.

**Employer Ration of Insurance Premium:** Additional employment required due to induced investment is paid by the Ministry of Economy.

**Area Allocation For Investment:** Area allocation can be made for investments beneficiary of pre-determined regional inducements by the Ministry of Finance.

**Interest Inducement:** It is credit points for up to 75 % credit interest of fixed investment amount written on inducement document. It can be applied for the first 5 years of investment.



## UTILIZATION OF SUB-REGIONAL INDUCEMENT

If an investment

- is established in an organized industrial region
- is established by at least five investors and arranged to obtain integrated solutions, it may get support for tax cut and employer ration of insurance premium from a sub-regional inducement at the determined time and amounts.





## SUPPORT PROGRAM OF RURAL DEVELOPMENT INVESTMENT

APPLICATOR: MINISTRY OF FOOD, AGRICULTURE AND LIVESTOCK

### ECONOMIC INVESTMENTS

<b>SUPPORT ENTRY</b>	New investments for processing, storage and packaging of agricultural products, increasing capacity of present companies or modernizing used technology or completing previously started investments
<b>WHO CAN APPLY</b>	Natural and legal persons
<b>INVESTMENT SUBJECT</b>	<ul style="list-style-type: none"><li>• Proccessing, packaging and storing of plant products</li><li>• Proccessing, packaging and storing of animal products</li><li>• Proccessing, packaging and storing of aquaculture products</li><li>• Storing of agricultural products (steel silo)</li><li>• Cold air storage</li><li>• Greenhouse investments using renewable energy resources. Energy production from alternative energy resources such as geothermal, biogas, sun and wind for agricultural practices</li><li>• Animal originated fertilizer processing and packaging</li><li>• Fixed investments for sheep, goat and buffalo</li></ul>
<b>INVESTMENT AMOUNT AND SUPPORT RATIO</b>	<ul style="list-style-type: none"><li>» Investment amounts for grant<ul style="list-style-type: none"><li>• Natural persons : 300.000 TL</li><li>• Legal persons : 800.000 TL</li></ul></li><li>» Ratio of grant support : % 50</li></ul>

**Note:** Details can be found at the regulation number 2013/59 published on number 28851 Official Newspaper dated 12.14.2013





## SUPPORTING PERSONAL IRRIGATION INVESTMENTS

<b>SUPPORT ENTRY</b>	For supporting social and economic development of rural regions, buying and installing pre-determined irrigation systems at personal level
<b>WHO CAN APPLY</b>	Natural and legal persons
<b>INVESTMENT SUBJECT</b>	<ul style="list-style-type: none"> <li>• Installation of drip irrigation system in a field</li> <li>• Installation of sprinkle irrigation system in a field</li> <li>• Installation of micro sprinkle irrigation system in a field</li> <li>• Buying machines for lineer sprinkle irrigation system</li> <li>• Buying machines for center pivot sprinkle irrigation system</li> <li>• Buying machines for drum sprinkle irrigation system</li> <li>• Establishment of irrigation system working with sun energy</li> </ul>
<b>INVESTMENT AMOUNT AND SUPPORT RATIO</b>	» Investment amounts for grant <ul style="list-style-type: none"> <li>• Natural persons : 100.000 TL</li> <li>• Agricultural companies : 200.000 TL</li> <li>• Irrigation cooperatives : 200.000 TL</li> </ul> » Ratio of grant support : % 50

**Note:** Details can be found at the regulation number 2013/28 published on number 28664 Official Newspaper dated 06.01.2013





## SUPPORTING PROGRAM FOR BUYING MACHINES AND EQUIPMENTS

<b>SUPPORT ENTRY</b>	For supporting social and economic development of rural regions, buying and installing pre-determined machines and equipments	
<b>WHO CAN APPLY</b>	Natural and legal persons	
<b>SUPPORTED MACHINES AND EQUIPMENTS</b>	<ul style="list-style-type: none"> <li>• Direct sowing machine into stubble</li> <li>• Apiculture machine and equipment</li> <li>• Baler machine</li> <li>• Transportation tank for live fish</li> <li>• Rice plantlet sowing machine</li> <li>• Establishment of netting system</li> <li>• Binder</li> <li>• Seeder</li> <li>• Motorized scythe</li> <li>• Disk raker</li> <li>• Cotton picking machine</li> <li>• Nut picking machine</li> <li>• Beet harvester</li> <li>• Potato harvester</li> <li>• Pulverizator</li> <li>• Sap chopping machine</li> <li>• Branch chopping machine</li> <li>• Sap gathering hay machine</li> <li>• Distribution machine for farm fertilizer</li> <li>• Rock collection machine</li> <li>• Feed preparation machine</li> <li>• Olive harvesting machine</li> <li>• Silage machine</li> <li>• Drum filterlcng machine in aquaculture</li> <li>• Cold storage in fishing boats</li> <li>• Incubator for aquaculture</li> <li>• Tractor used by hand</li> <li>• Sun collector</li> <li>• Hoeing machine between rows</li> <li>• GPS and seed evaluator</li> <li>• Milking unit and cooling tank</li> <li>• Soil milling machine</li> </ul>	
<b>INVESTMENT AMOUNT AND SUPPORT RATIO</b>	<ul style="list-style-type: none"> <li>• Investment amounts for grant</li> <li>Natural persons : 50.000 TL</li> <li>Legal persons : 100.000 TL</li> <li>• Ratio of grant support : % 50</li> </ul>	

**Note:** Details can be found at the regulation number 2013/27 published on number 28689 Official Newspaper dated 06.26.2013





## GRANT SUPPORTS OF EUROPEAN UNIONS INCLUSIVE TO IPARD

**APPLICATOR:** SUPPORTING ORGANIZATION OF AGRICULTURE AND RURAL DEVELOPMENT (TKDK)

ACTION NUMBER		Spending Limits Based on Support (€) (Min - Max)	Support Rate (%)
<b>101-1</b>	Investing milk producing agricultural corporations	15.000-1.000.000	50-65
<b>101-2</b>	Investing meat producing agricultural corporations		
	• Budget Item-1 (Red meat)	20.000-1.000.000	50-65
	• Budget Item -2 (Milk collecting producer unions)	15.000-500.000	50-65
<b>103-1</b>	Processing and marketing of milk and milk products		
	• Budget Item -1 (Milk processing facilities)	50.000-3.000.000	50
	• Budget Item -2 (Milk collecting producer unions)	25.000-1.000.000	50
<b>103-2</b>	Processing and marketing of meat and meat products		
	• Budget Item -1 (Processing and marketing of red meat)	30.000-3.000.000	50
	• Budget Item -2 (Processing and marketing of poultry meat)	50.000-1.500.000	50
<b>103-3</b>	Processing and marketing of fruits and vegetables	50.000-1.250.000	50
<b>103-4</b>	Processing and marketing of aquaculture products	50.000-1.500.000	50
<b>302-1</b>	Diversifying and development of farm activities	5.000-250.000	50
<b>302-2</b>	Development of traditional products and mikro-corporations	10.000-250.000	50
<b>302-3</b>	Rural tourism	15.000-400.000	50
<b>302-4</b>	Development of cultural fishing	15.000-200.000	50

## SUPPORTED AREAS BY DEVELOPMENT AGENCIES

**APPLICATOR:** MEVLANA DEVELOPMENT AGENCY (MEVKA)

Development agencies can support agricultural sector based on Financial Support Programs prepared and financed by Board of Directors of Development Agency and supported by Working Program and Budget approved by Ministry of Development. Within the context of these programs, there are detailed information about preferential areas, sample project subjects and application conditions in the web pages and application forms of development agencies.

Development agencies may give “financial and technical” support based on the rules mentioned in “the Regulations of Preparing Projects and Supporting Activities for Development Agencies”. These are:



- Local authorities
- Universities
- Public organizations
- Professional organizations at public level
- Civil society organizations
- Profit seeking companies
- Cooperatives and unions
- Natural and legal persons

## **APPLICATED SUPPORT TYPES**

### **Direct Activity Support**

For regional development and obtaining important opportunities for competition power and also preventing threat and risks towards economy of the region project proposals are supported directly without any project offer calls. Local authorities, universities, other public organizations, professional organizations at public level, civil society organizations, cooperatives and unions can apply to this support program.

### **Interest Support**

Interest support is an unreturned inducements given by agencies for projects presented by natural and legal persons for paying interest of their loans obtained from stock brookers. Small and medium size companies, farmers and farmer unions, and self-employed persons can obtain this support.

### **Support for Interest-free Loan**

This support program is for profit seeking natural and legal persons and is given by stock brookers through agreement signed between agency and stock brookers. Loans are paid back in instalments without any interest according to related regulations of agencies. Small and medium size companies, farmers and farmer unions, and self-employed persons can obtain this support.



## AGRICULTURAL CREDITS

**APPLICATOR:** ZIRAAT BANK, AGRICULTURAL CREDIT COOPERATIVES

LOW INTEREST INVESTMENT and COMPANY CREDIT APPLICATIONS FOR 2013				
CREDIT SUBJECTS		DISCOUNT RATE (%)		
ANIMAL PRODUCTION SUBJECTS		Investment Season	Operation Season/Credit	Upper limit of Credit (TL)
Stud cattle growing for milk	Up to 750.000 TL	100	50	20.000.000
	750.001-5.000.000 TL	75	50	
	5.000.001-20.000.000 TL	50	25	
Common animal production	Up to 50.000 TL	50	50	500.000
	50.001-500.000 TL	25	25	
Stud animal	Cattle growing for meat	100	100	7.500.000
	Heifer growing	100	100	7.500.000
Great cattle	Growing	50	25	3.000.000
	Feeding	50	50	3.000.000
Small cattle (Sheep/goat)	Growing	100	100	5.000.000
	Feeding	100	50	1.500.000
Apiculture		50	50	1.500.000
Poultry sector		50	25	3.000.000
Poultry sector stud growing		100	100	7.500.000
Aquaculture growing		100	50	5.000.000
Aquaculture hunting		50	25	1.500.000



LOW INTEREST INVESTMENT and COMPANY CREDIT APPLICATIONS FOR 2013				
CREDIT SUBJECTS		DISCOUNT RATE (%)		Upper limit of Credit (TL)
PLANT PRODUCTION SUBJECTS		Investment Season	Operation Season/Credit	
Controlled greenhouse agriculture	Up to 750.000 TL	50	50	10.000.000
	750.001-5.000.000 TL	50	50	
	5.000.001-10.000.000 TL	25	25	
Common plant production	Up to 50.000 TL	50	50	500.000
	50.001-500.000 TL	25	25	
Perennial fodder plants production		100	75	1.500.000
National certified seed, seedling, plantlet production		100	100	10.000.000
Use of national certified seed and seedling		50	50	1.000.000
Use of national certified plantlet		50	50	5.000.000
Fine agriculture / Organic agriculture		50	50	5.000.000

LOW INTEREST INVESTMENT and COMPANY CREDIT APPLICATIONS FOR 2012				
SOME SUBJECTS		DISCOUNT RATE (%)		Upper limit of Credit (TL)
		Investment Season	Operation Season/Credit	
Agricultural mechanization		50	50	1.500.000
Modern pressured irrigation		100	100	1.500.000
Buying land		25	25	500.000
Other production subjects		25	25	500.000

#### Credit Times:

- » Up to 24 months in business credits
- » Up to 7 years in investments credits







## TEN REASONS FOR INVESTING TO AGRICULTURE IN KARAMAN

- 1. STRATEGIC LOCATION**
- 2. STRONG INDUSTRY DEPENDING TO AGRICULTURE**
- 3. POTENTIAL OF ORGANIC AGRICULTURE**
- 4. DEVELOPING SEED SECTOR**
- 5. POTENTIAL OF HIGH QUALITY CEREAL PRODUCTION AND DEMAND**
- 6. PRESENCE OF FRUIT GARDENS AND POTENTIAL OF HIGH QUALITY PRODUCTION**
- 7. POTENTIAL OF MODERN ANIMAL GROWING**
- 8. ENERGY**
- 9. RURAL TOURISM**
- 10. IMPORTANT INDUCEMENT, SUPPORT AND EXEMPTION FOR AGRICULTURAL INVESTMENTS**

### **STRATEGIC LOCATION**

1. It is one of the cities bounding Middle Anatolia to Mediterranean
2. It is the city of having the lowest risk for an earthquake in Turkey
3. It is among cities of the Project of Konya Valley
4. It has a potential of the richest renewable energy sources in Turkey
5. It is in the network of speed train
6. It is neighbor to cities with strong economy and agriculture (Konya, Mersin, Antalya, Adana)
7. It has neighbors which have airports and sea travel opportunities
8. It has a very good cultural background and old history
9. It is reach for natural genetic sources due to being a transition zone
10. It has a strong transportation potential because of its developed industry



## **STRONG INDUSTRY DEPENDING TO AGRICULTURE**

1. It produces one third of total biscuit production of Turkey
2. It produces one fifth of total bulgur production of Turkey
3. It has a young population and well experienced labor
4. Possibility of getting educated in Engineering Faculty and colleges
5. It has a high potential of processing milk
6. It has potential of obtaining quality agricultural raw products
7. It has wide lands of fruit gardens and big amounts of fruit productions
8. It has reach biologic variation in traditional foods
9. It is close to big markets
10. It has wide lands for energy and agriculture investments

## **POTENTIAL OF ORGANIC AGRICULTURE**

1. Available climatic and ecological conditions for organic agriculture
2. Micro climatic areas
3. Need for improving soil conditions and soil protection
4. Students getting educated in the department of organic agriculture
5. Less incidence of diseases
6. Diversity of medicinal and aromatic plants and growing possibility
7. Abundance of endemic plant existence
8. Production potential of quality organic seed
9. Socio-economic structure available for rural development model
10. Less air pollution



## **DEVELOPING SEED SECTOR**

1. Good climatic conditions for quality seed production
2. Wide arable land
3. Less incidence of plant disease
4. Presence of wide lands available for isolating open pollinated plant species
5. Being neighbor to cities with strong agriculture and requirement of high amount of seeds
6. Potential of contracted agricultural production
7. Need for high quality agricultural products for agricultural industry
8. Presence of firms giving guarantee for buying products in seed sector
9. Potential of vegetable seeds in irrigated areas
10. Inducements and support for seed given by Ministry of Food, Agriculture and Livestock

## **POTENTIAL OF HIGH QUALITY CEREAL PRODUCTION AND DEMAND**

1. Good climatic conditions for durum wheat production
2. Good climatic conditions for barley production with high protein rates
3. High yielding potential for corn in irrigated areas
4. Potential of high quality bread wheat production
5. Presence of wide arable land
6. Presence of agricultural industry which supports contracted production
7. Strong industry which is active in the biscuit sector and high buying potential
8. Presence of strong bulgur industry
9. Presence of experienced farmers in wheat cultivation
10. Inducements and support for seed given by Ministry of Food, Agriculture and Livestock



## **PRESENCE OF FRUIT GARDENS AND POTENTIAL OF HIGH QUALITY PRODUCTION**

1. Good climatic conditions for high quality fruit production
2. It is one of the most important centers of apple production
3. Potential of organic fruit production
4. Need for information and service required in fruit production
5. Good climatic condition for out-of-season fruit production
6. Big investments done for fruit production
7. Need for fruit classification, packaging and cold storages
8. Wide lands permitting to establish intensified gardens
9. Presence of a juice factory and need for new factories
10. Potential of high quality grape production

## **POTENTIAL OF MODERN ANIMAL GROWING**

1. High potential of producing crude and dense feed
2. Easiness in obtaining stud animal
3. Organized zone of animal growing
4. Increasing number of milk processing companies
5. Wide pasture lands and geografic and cultural conditions for sheep and goat growing
6. Sheep races specified fort he region and public sheep breeding efforts
7. Good ecological conditions for organic animal growing
8. Modern companies in chicken growing for egg and closeness to markets
9. Goog ecological conditions for apiculture and closeness to transitional zones
10. Potential of aquaculture and fisheries



## RURAL TOURISM

1. One of the first settled area of Christians in Anatolia
2. Having very old historical state tradition
3. Celebration of Turkish Language Festival
4. Traditional Anatolian village life and potential of building ecological villages
5. Region specific foods
6. Wildlife in Karadağ and potential of paragliding
7. One –thousand-one Church and other historical churches
8. Cereal storages in Taşkale and Manazan caverns
9. Presence of Yunus Emre and Mümine Hatun Tombs
10. Easy transportation





## **ENERGY**

1. Karapınar-Ayrancı lignite sources
2. Very long periods of sunny days
3. Potential of wind power
4. Having both fossil and renewable energy sources together
5. Saving in energy usage due to land consolidation
6. Possibilities of using solar power in irrigation
7. Decreases in processing costs of agricultural products due to renewable energy
8. Less possibility of earthquake for safe energy investments
9. Presence of wide public lands for establishing solar power fields
10. Efficient solar energy production due to low relative humidity

## **IMPORTANT INDUCEMENT, SUPPORT AND EXEMPTION FOR AGRICULTURAL INVESTMENTS**

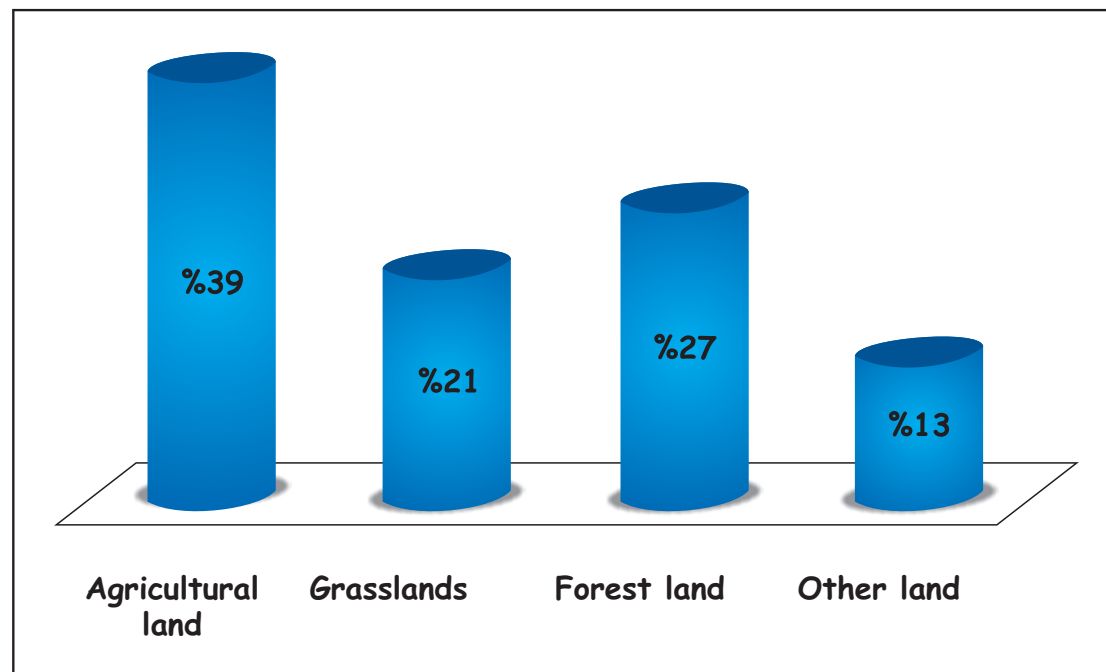
1. Being in the third region according to General Inducement Regulation
2. Supports of the Ministry of Food, Agriculture and Livestock
3. Multiple way IPARD supports
4. EU supports
5. TUBITAK supports
6. KOSGEB supports
7. MEVKA supports
8. KOP Regional Development Presidency supports
9. Research and Development support of KMU Technological Transfer Office
10. Region specific supports of Public and Private Banks



## INTRODUCTION OF INVESTMENT AREAS

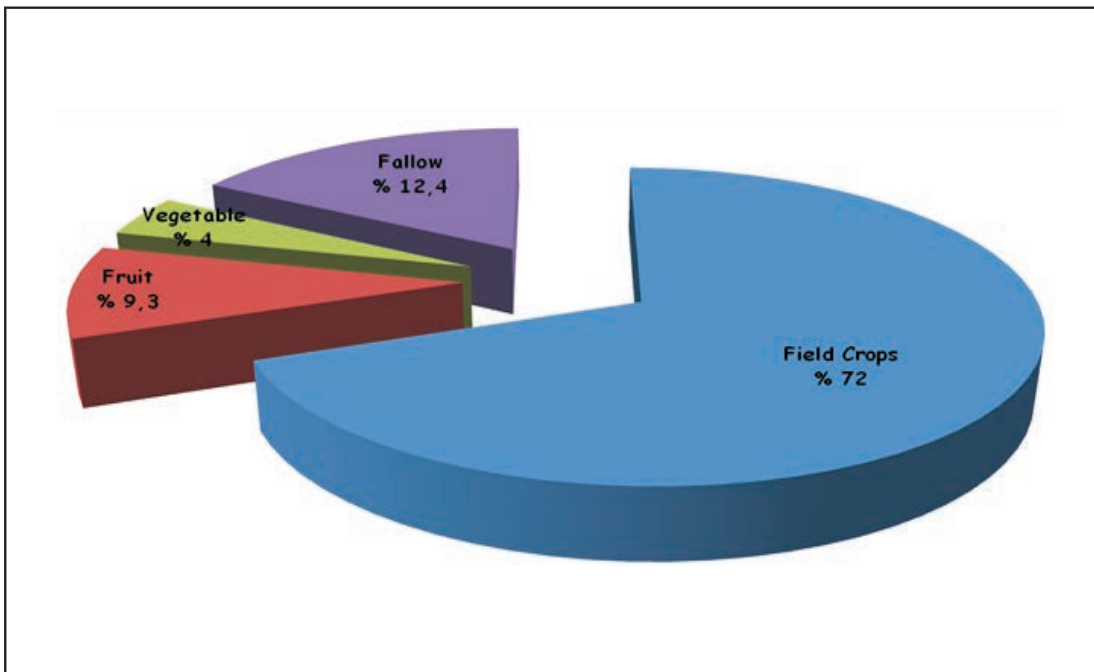
### CROP PRODUCTION

Crop production is very important for Karaman. Agriculture is practiced on 346.848 ha (39 %) of totally 885.100 ha area while 187.115 ha (21 %) of it is pasture land and 241.152 ha (27 %) is forest (Figure 6).



**Figure 6:** Distribution of lands in Karaman





72 % of total cultivated land of Karaman were used for field crops while 9,3 % was for fruits and 4 % for vegetables (Figure 7).

**Figure 7.** Distribution of lands in terms of crop production

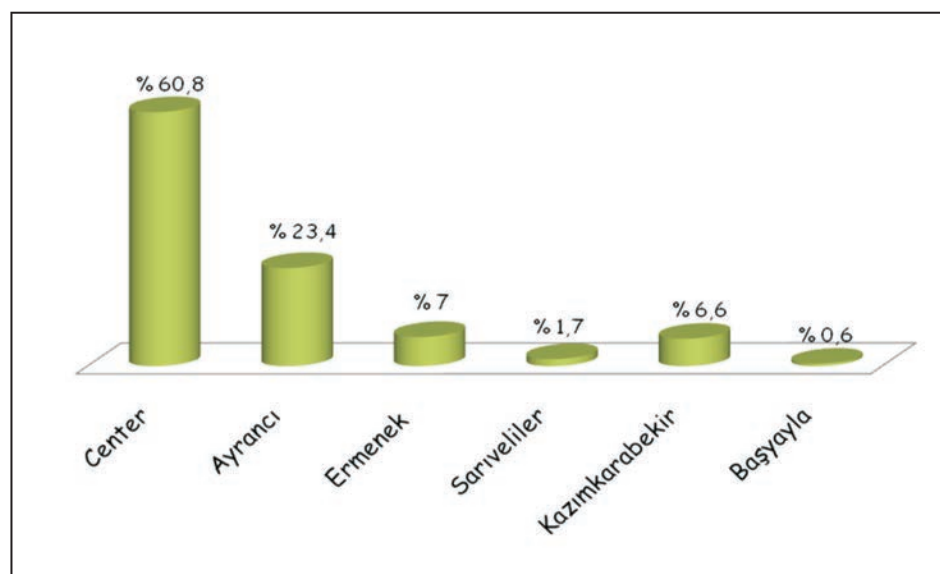


City center has 60,8 % of agriculture lands whereas the towns have the rest such as Ayrancı 23,4 %, Ermenek 7 %, Sarıveliler 1,7 %, Kazımkarabekir 6,6 % and Başyayla 0,6 % (Table 9; Figure 8).

**Table 9.** Distribution of lands of Karaman and its towns based on their use

Towns	Field	Fruit Garden	Vegetable Garden	Fallow	Unused Land	Pastures	Forests	Cultivated Land	Total Land
<b>Ayrancı</b>	68.757	1.661	748	8.416	1.517	90.098	53.568	81.096	244.745
<b>Başyayla</b>	915	733	74	254	0	1.248	9.335	1.956	19.671
<b>Ermenek</b>	9.832	3.416	596	3.988	0	7.380	81.662	24.101	112.040
<b>K. K. Bekir</b>	17.862	431	681	2.701	1.264	4.069	7.426	22.939	40.108
<b>Central Town</b>	147.358	24.214	11.791	27.294	6.329	80.976	60.742	210.737	425.660
<b>Sarıveliler</b>	3.646	1.953	0	366	54	3.344	28.419	6.019	42.876
<b>Total</b>	248.370	32.408	13.890	43.016	9.164	187.115	241.152	346.848	885.100

**Source:** Department of Agriculture, Food and Livestock of Karaman, 2013



**Figure 8.** Distribution of agriculture lands to the towns



## FIELD CROPS

Field crops are grown on about 248.370 ha of total agriculture land of Karaman. About 12,4 % of the total agricultural lands (346.848 ha) is left for fallow (Table 9). In addition, fruits, juicy and spicy plants cover 32.000 ha and vegetables are grown on 13.000 ha (Table 10). Mostly grown field crops are wheat, barley, chickpea, beans, sunflower, sugar beet and oat (Table 11 ; Figure 9).





**Table 10.** Distribution of agricultural lands in city center and towns of Karaman (da)

Town Name	Planting Area of Cereals and Other Crop Species	Vegetable Garden	Planting area of Fruits, Juicy and Spicy Plants
City Center	1.473.582	117.906	242.139
Ayrancı	687.566	7.480	16.610
Başıyayla	9.146	740	7.334
Ermenek	98.323	5.959	34.155
Kazımkarabekir	178.617	6.815	4.313
Sariveliler	36.457	0	19.530

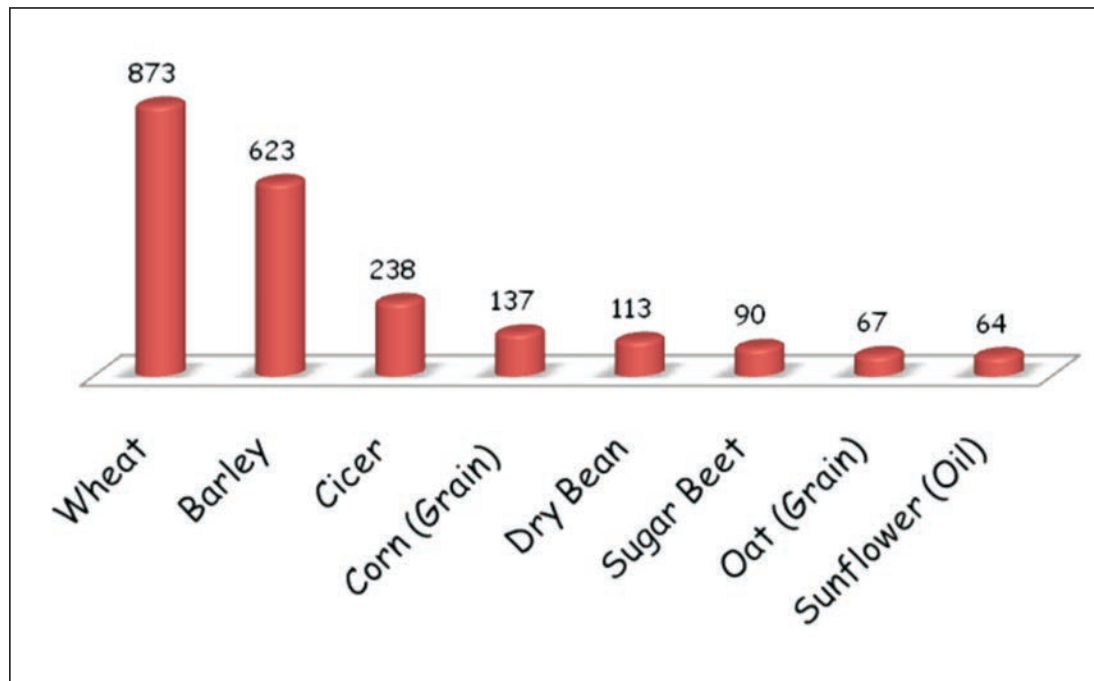
**Source:** TUIK, 2013

**Table 11.** Most commonly grown field crops in Karaman

Crop Species	Area (da)	Production (Ton)
Wheat	872.716	232.794
Barley	622.950	182.758
Chickpea	237.816	36.442
Corn (Grain)	136.653	132.650
Dry Bean	113.390	36.322
Sugar Beet	89.996	541.008
Oat	67.344	16.732
Sunflower	78.292	21.015

**Source:** TUIK, 2013





**Figure 9.** Distribution of field crops in Karaman

Karaman has a potential of providing high quality raw-material for the agricultural industry. In this respect, some advices and priority areas are given below:

- Some measures should be taken to increase organic matter of soils
- Durum wheats should be improved for mineral matters
- High quality wheat cultivars should be grown to supply raw-matter desired by the biscuit and bulgur industries
- New varieties tolerant to drought should be added into the production system
- Cultivars having high water use efficiency should be chosen
- Use of certified seeds should be increased
- If water is limited, crop species with high water use efficiency like corn should be restricted
- Farmers should be encouraged to grow legumes, especially dry bean.



- Alternative oil plants which can grow under dry conditions like safflower should be planted more
- Opportunities for organic farming should be taken into consideration, and farmers should be encouraged for organic farming

## CEREALS

Cereals include wheat, barley, rye, oat, triticale, corn, sorghum and panicum sp. 585.450 tons of cereals were produced on 1.773.000 da fields in Karaman in 2013 (Table 12). Wheat was at the first place in terms of planting area and production while barley, corn and rye followed wheat in order. As given in Table 12, durum wheat was planted on 515.792 da, bread wheat was on 356.924 da and barley was 622.950 da area.

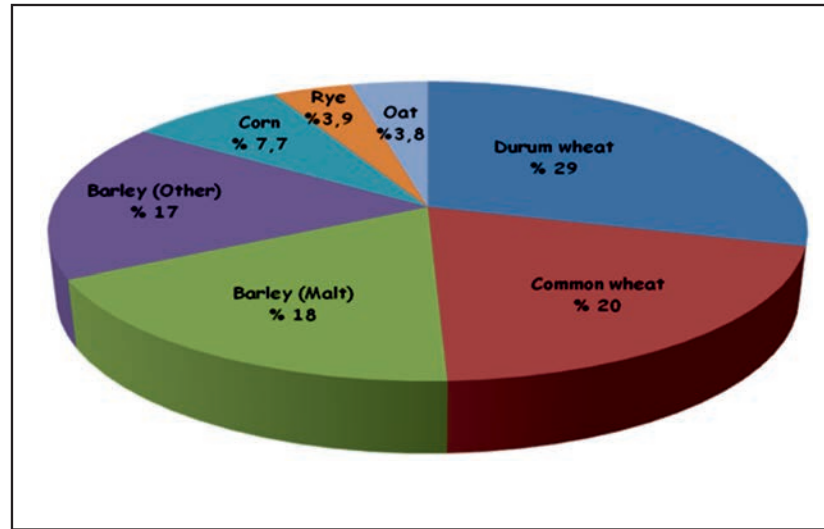
**Table 12.** Planting areas and production amounts of cereals in Karaman

Crop Name	Planting Area (da)	Production (ton)	Yield (kg/da)
Barley (Malt)	322.000	94.500	293
Barley (Other)	300.950	88.258	293
Wheat (Other)	356.924	87.777	246
Wheat (Durum)	515.792	145.017	281
Rye	69.721	19.578	281
Corn (Grain)	136.653	132.650	971
Triticale (Grain)	3.524	938	266
Oat (Grain)	67.344	16.732	248
Total	1.772.908	585.450	

**Source:** TUIK, 2013

Durum wheat and bread wheat occupies 29 % and 20 % of cereal planted areas of Karaman, respectively while barley was planted on 35 % of these areas, corn was on 7,7 %, rye was on 3,9 % and oat was on 3,8 % (Figure 10).





**Figure 10.** Distribution of cereal species based on their planted areas in Karaman





Wheat is the most commonly grown crop in Turkey and Karaman. Around 22 million tons of wheat were produced on 77.7 million da area in Turkey in 2013. In Karaman, on the other hand, approximately 233.000 tons of wheat were produced on 872.716 da area (TUIK, 2013).

Bread wheat was produced on 64.9 million da area whereas durum wheat was grown on 12.8 million da area in Turkey. These values for bread and durum wheats were, respectively, 356.924 da and 515.792 da in Karaman (TUIK, 2013).

Karaman, in general, provides about 1.06 % of total wheat production of Turkey. Out of 22 million tons of total wheat production, 17.98 million tons were belong to bread and other types of wheat and 4.08 million tons were accounted for durum wheat. When looked at Karaman's wheat production values, Karaman provided 0.5 % of bread and other types of wheat but 3.6 % of durum wheat.

Due to its climatic and soil conditions, Karaman is one of the best places of Turkey for high quality wheat production. Especially, industry using wheat as raw material increased rapidly in recent years. Therefore, growing high quality wheats for the biscuit and bulgur industries should have priority in Karaman and this reality must be considered all time to take advantage of it.



## LEGUMES

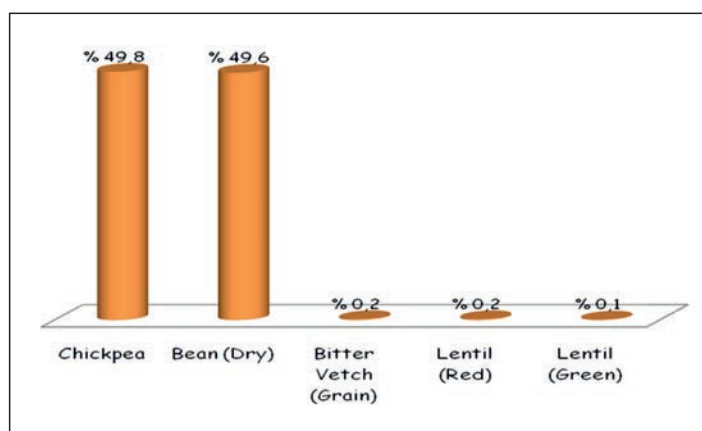
Bean, lentil, chickpea, fava bean, green peas, bitter vetch and cowpea are called legumes. Due to high protein contents in their grains and other vegetable parts, legumes are very important as animal feed and human food and it is also important in plant rotations because of their symbiotic nitrogen-fixing abilities.

Chickpea are grown on 6,9% and bean are planted on 3,3 % of the total agriculture lands of Karaman. Chickpea and bean have around 36 thousand tons of production and are the most commonly grown legumes. They are followed by lentil and bitter vetch with a production of 250 tons and 163 tons, respectively (Table 13). Chickpea accounts for 49,8 % and bean for 49,6 % of totally 73.000 tons of legume production in Karaman (Figure 11).

**Table 13.** Legume planted areas and production amounts in Karaman

Legume Species	Planting area (da)	Production (ton)	Yield (kg/da)
Bitter vetch (grain)	2.500	163	65
Dry Bean	113.390	36.322	320
Lentil (red)	1.411	166	118
Lentil (green)	720	84	117
Chickpea	237.816	36.442	153
Total	355.837	73.177	

**Source:** TUIK, 2013



**Figure 11.** Distribution of legumes in terms of production percentages in Karaman







## INDUSTRIAL CROPS

Industrial crops include several plant species, provide raw-materials for industry and are not consumed directly as human food. Industrial crops are very important group of plants with their importance in industry and export potentials.

Industrial crops are divided into four main sections as oil crops, starch-sugar crops, fiber crops and medicinal-aromatic crops. Sugar beet, potato, artichoke, tobacco, tea plant, sunflower, peanut, sesame, rapeseed, safflower, cotton, linseed and hemp plant are mostly grown industrial crops in Turkey.

Sugar beet, potato and sunflower are the mostly common produced industrial crops in Karaman. Sugar beet are grown on 89.996 ha area and produced about 541.008 tons (Table 14). Potato follows sugar beet with 33.4000 tons of production and sunflower with 21.015 tons of production (TUIK, 2013).

**Table 14.** Potato and sugar beet planted areas and production amounts in Karaman

Crop Species	Planted area (da)	Production (ton)	Yield (kg/da)
Potato	10.730	33.400	3.113
Sugar beet	89.996	541.008	6.032

**Source:** TUIK, 2013

## OIL CROPS

Sunflower and safflower are most commonly grown oil crops in Karaman. In 2013, 21.015 tons of sunflower ( 19.132 tons of this is for oil production) and 779 tons of safflower were produced in Karaman. Based on 2012 data, 33 tons of peanut and 5 tons of sesame were also produced (Table 15).





**Table 15.** Potato and sugar beet planted areas and production amounts in Karaman

Crop Species	Planted area (da)	Production (ton)	Yield (kg/da)
Safflower	8.470	779	92
Sunflower (as appetizer)	14.700	1.703	116
Sunflower (for oil)	63.592	19.312	304
Sesame*	50	5	100
Peanut*	140	33	236

**Source:** TUIK, 2013\*

TUIK 2012 data



## FODDER CROPS

Fodder crops are plant species used for feeding animals as dry or green plant, silage, grain and tuber. Most commonly grown fodder crops in Turkey are alfa alfa, trefoil, common vetch, silage corn and bitter vetch. In Karaman, Hungarian and common vetches take the first place in fodder crops production.

Silage corn, alfa alfa, bitter vetch and trefoil follow them in order. Fodder crops are grown on 176.672 da area in Karaman, and of this total planting area, Hungarian and common vetches occupy 35 % of the area while silage corn is on 26 %, alfa alfa on 22 %, bitter vetch on 11 % and trefoil on 4 % (Table 16). Development of animal husbandry in Karaman also induce the increase in fodder crops production.





**Table 16.** Fodder crops planted areas and production amounts in Karaman

Crop Species	Planted area (da)	Production (ton)	Yield (kg/da)
Bitter vetch (green plant)	20.160	16.120	800
Vetches (green plant)	61.680	83.985	1.362
Vetches (grain)	2.700	311	115
Animal beet	250	1.000	4.000
Trefoil (green plant)	7.462	11.657	1.564
Corn (silage)	46.185	263.180	5.698
Alfa alfa (green plant)	38.235	188.776	4.937
Total	176.672	565.029	

**Source:** TUIK, 2013

## MEDICINAL AND AROMATIC CROPS

Karaman has good climatic conditions for growing medicinal and aromatic crops and has also potential of pre-agreed production and investment. Four tons of sage on 30 da area, 76 tons of melisa on 145 da area, 10 tons of cumin on 200 da area are produced in Karaman (TUIK, 2013). Based on 2013 data given by the Department of Agriculture, Food and Livestock of Karaman, organic medicinal crop production was practiced on 138 da area in Ermenek and on 82 da area in Sarveliler.





## SEED PRODUCTION

Karaman has a potential of being an important seed production area due to low humidity and less incidence of plant diseases and relatively good climatic conditions. In the city, generally wheat, barley, sunflower, potato and bean seeds are produced.



With pre-agreed production, 10.474 tons of seeds were produced on 17.642 da area for different seed companies in 2013. As given in Table 17, 2.474 tons of wheat seeds, 1.280 tons of barley seeds, 2.442 tons of sunflower seeds, 52,5 tons of bean seeds and 4.225 tons of potato tubers as seed were produced in Karaman in 2013 (Table 17).

**Table 17.** Pre-agreed production report of Karaman for 2013

Product	Number of total producer	Number of pre-agreed producer	Area (da)	Amount (ton)	Customer Company
Wheat	9.135	47	3.944	2.474	Tarım Kredi Koop. Konya Bölge Birliği Müdürlüğü
Barley	4.858	30	1.921	1.280	Tarım Kredi Koop. Konya Bölge Birliği Müdürlüğü
Potato	50	5	960	4.225	İntar Teks. San. ve Tic. Ltd. Şti.
Bean	1.183	1	80	22,50	İhracatçı B. Tohumculuk ve Araş. S. Tic. A.Ş.
Bean	1.183	1	100	30	Anamas Tarım Ltd. Şti.
Sunflower	1.328	190	10.550	2.427	Limagrain Tohum Islah ve Üretim A.Ş.
Sunflower	1.328	1	87	15,15	Syngenta Tarım A.ş.

**Source:** Department of Agriculture, Food and Livestock of Karaman, 2013



**Tablo 18.** Pre-agreed production report of Karaman for 2012

Product	Number of total producer	Number of pre-agreed producer	Area (da)	Amount (ton)	Customer Company
Wheat	46	46	6.500	3.785,3	Tarım Kredi Koop. Konya Bölge Birliği Müdürlüğü
Wheat	2	2	178	107,95	Tasaco Tarım A.Ş.
Barley	8	8	1.052	522,66	Tarım Kredi Koop. Konya Bölge Birliği Müdürlüğü
Potato	6	5	770	3.640	İntar Teks. Ltd. Şti.
Bean	2	2	77	25	İhracatçı Birlik. Tohumculuk ve A. San. Tic. A.Ş.
Bean	1	1	27	9,5	Anamas Tarım Ltd. Şti.
Sunflower	75	75	3.880	905	Limagrain Tohum Islah ve Üretim A.Ş.
Sunflower	3	3	830	107,9	Pioneer Tohumculuk A.Ş.

**Source:** Department of Agriculture, Food and Livestock of Karaman, 2013

Production of field crops seed are increasing because of supports given in this area. Karaman has a big potential of being a center for seed production. Presence of wide arable lands, potential of irrigation, presence of lands providing isolation for open pollinated crops seed production such as corn, suitable temperature differences between day and night, presence of open-minded farmers for pre-agreed seed farming make Karaman available for seed production. In addition, vegetable seed production may be another possible investment area in irrigatable areas in Karaman.



## HORTICULTURE

Karaman is among the cities for the production of high yielding and quality horticultural crops due to advantages of having more sunny days, relatively low humidity, high temperature differences between day and night but lower possibilities of plant diseases. Based on the 2013 statistical data, fruits, spicy and juicy plants were produced in 324.080 da and vegetables were produced in 138.900 da. Apple is the fruit species ranked at the first place in Karaman. Karaman produces 18.3 % of apples, 2.42 % of pears and cherries of total fruit production of Turkey. Karaman is at the second place in terms of apple planted area. And production amount.

Apple planting areas were increased making Karaman one of the most important apple production areas, and establishment of new apple gardens have been continued. Karaman will probably become the most important production center when apple yield is increased. Important investment for production and pruning techniques should be made to succeed. Success in apple production may help marketing of other fruit species. Traders coming to buy apple from Karaman may see and buy other fruit species such as pear, cherry, walnut, almond and quince. Due to this reason, planting areas of these fruits would increase as well.





Vegetable production is also important for Karaman. Some important investment areas for vegetables may be as following: organic vegetable production for babies and children, for rural development, drying and packaging. Another important fruit for Karaman is grapes, especially high quality dry grapes. Organic grapes are grown in Karaman and they are used in the production of grape molasses, thin sheet of sun-dried fruit pulp and dried grape seeds. These products provides high salaries for farmers. In general, horticultural investments in Karaman can be compiled under two main titles. First, yield and quality of main fruit species should be increased under present production models as well as investing for storage and marketing. Second, research and development efforts must be continued to improve higher quality products.





## FRUIT GROWING

The production quantities of some fruit species were given in Table 19. According to data, Karaman provides 8.10 % of total fruit production given in Table 19. The most striking data is belong to apple. Karaman produces 18.3 % of apple production of Turkey. Karaman is currently in the second place after Isparta with 541.479 tons of apple production based on 2013 statistics. Karaman will probably become more important apple producer because there are above 2.4 million apple trees not given fruits yet. Other commonly grown fruit species after apple in Karaman are pear, cherry and plum. Karaman produces 2.42% of pear and cherry and 2.02 % of plum of Turkey's production. Karaman also provides less than 1% of peach, apricot and sour cherry production of Turkey. In addition, 5.000 tons of olive were produced in the microclimatic areas of Karaman. According to 2013 statistics (Table 20), apple was grown on 207.971 da area and 71.2 % of it were at Karaman province while Ayranç town were second with 24 %

**Table 19.** Production amounts of some fruit species in Karaman and Turkey and proportional values in total.

Fruit Species	Karaman (ton)	Turkey (ton)	Proportional values in total (%)
Apple	571.479	3.128.450	18,3
Pear	11.196	461.826	2,42
Cherry	11.994	494.325	2,42
Pulm	6.189	305.393	2,02
Peach	3.908	637.543	0,61
Apricot	9.420	780.000	1,20
Sour cherry	2.235	179.752	1,24
Olive*	5.000	1.676.000	0,29
Total	621.421	7.663.289	8,10

**Source:** TUIK 2013, \*Department of Agriculture, Food and Livestock of Karaman

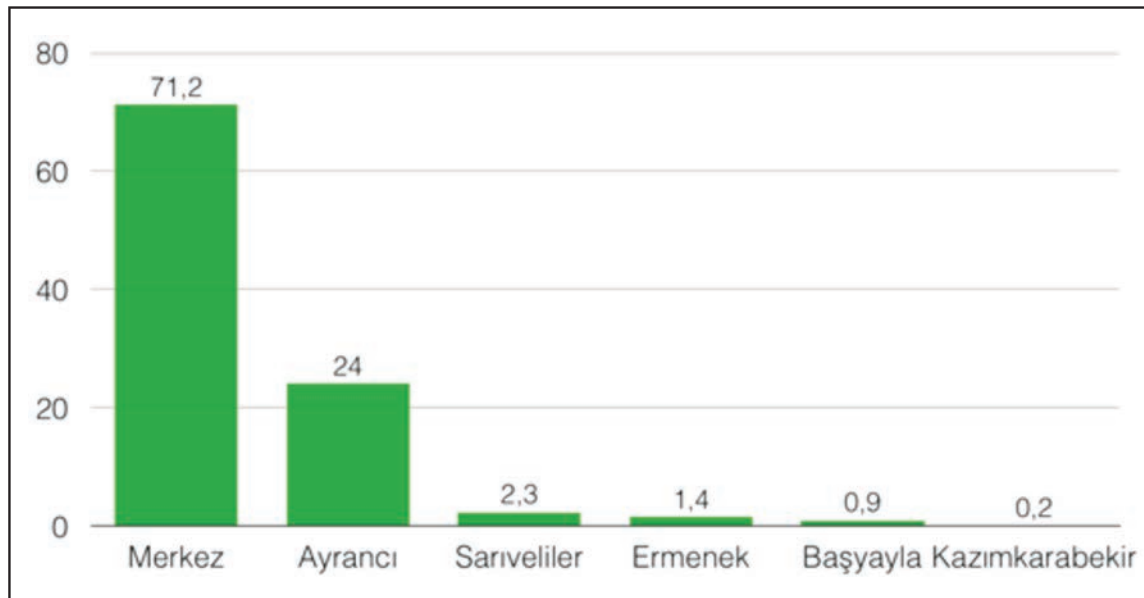


**Table 20.** Apple grown areas of towns and central province of Karaman and proportional distribution.

Towns	Area (da)	Production (ton)	Proportional distribution in production (%)
Central Province	171.871	406.835	71,2
Ayrancı	11.506	136.873	24,0
Sarveliler	10.318	12.905	2,3
Ermenek	8.565	8.271	1,4
Başyayla	4.119	5.293	0,9
Kazımkarabekir	1.592	1.302	0,2
Total	207.971	571.479	100

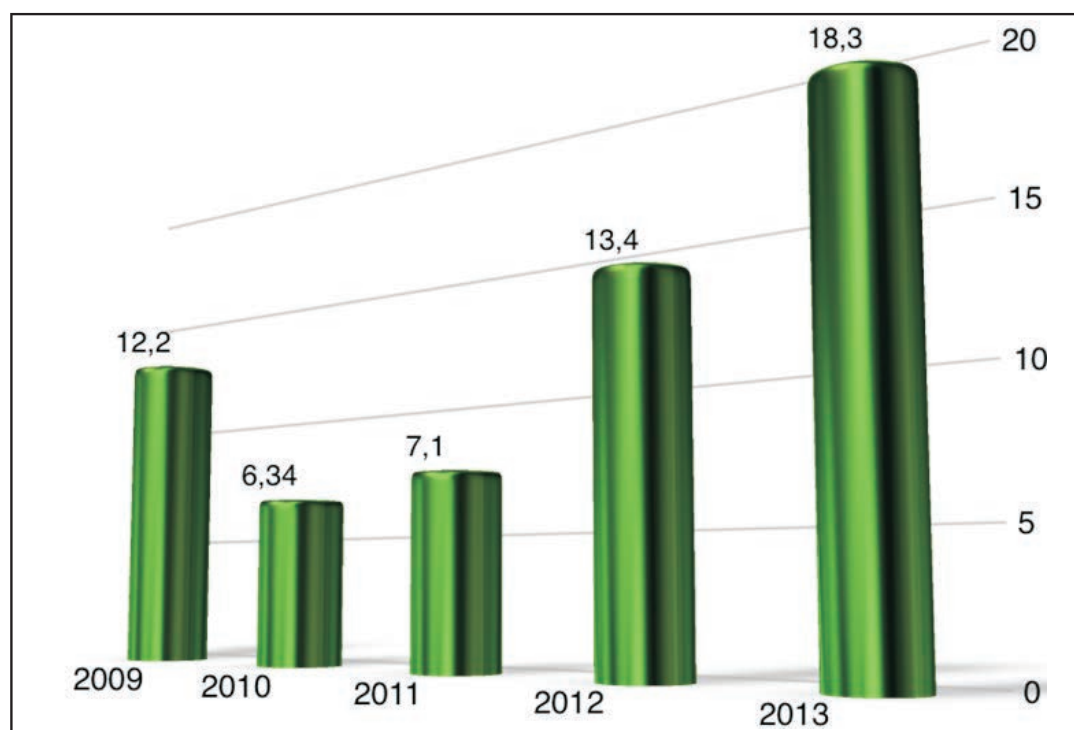
**Source:** TUIK 2013

The portions of the towns Karaman for apple production in 2013 (%)

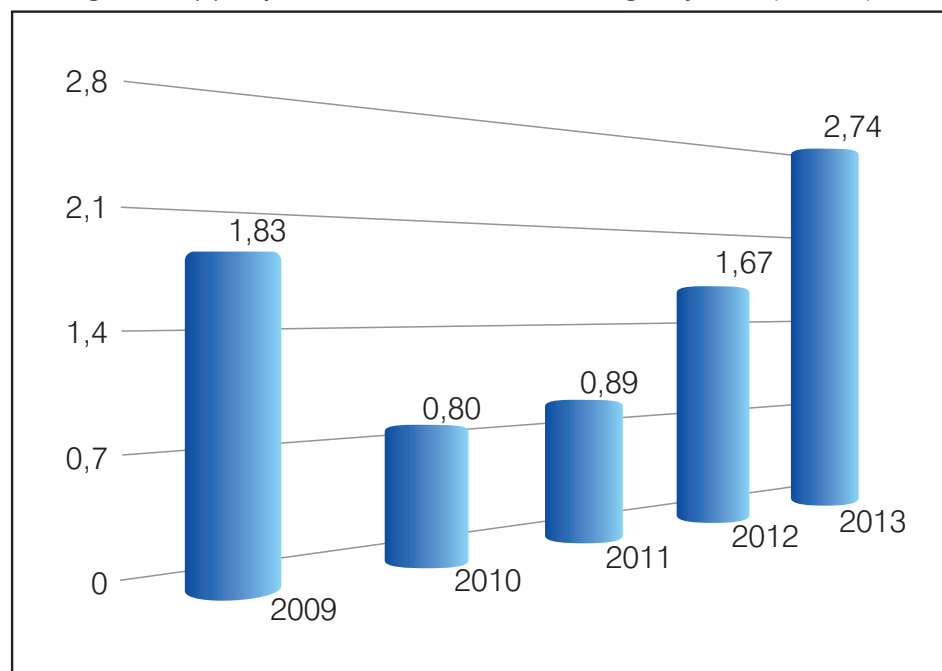




The portion of Karaman province for apple production in Turkey (%)



Changes in apple yield in Karaman according to years (ton/da)





Apple is the most important fruit species for Karaman. Karaman is at the second place in planting area and production. About four million young tree were planted in Karaman in the last few years and also a private company has established the biggest short (dwarf) apple garden in Akçaşehir/Karaman. This indicates the importance of Karaman in apple production.

Based on 2013 data given in Table 21, 4.751 tons of walnut and 2.351 tons of almond were produced in Karaman providing 2,23 % and 2,83 % of Turkey's total production, respectively.

Karaman by having different soil and climatic conditions is a city in which several fruit species can be grown. Shortly, Karaman have a potential of being a fruit production center by growing apple, pear and cherry on its valleys and growing cherry, sour cherry, walnut and almond on upper places.

**Table 21.** Production amounts of walnut and almond in Karaman and Turkey and proportional values in total.

Fruit Species	Karaman (Ton)	Turkey (Ton)	Proportional values in total (%)
Walnut	4.751	212.140	2,23
Almond	2.351	82.850	2,83

**Source:** TUIK 2013





The first and the most important reason for being a center for fruit production is the production at the level of consumer standards in big amounts and marketing of this products. Karaman provides important opportunities for growing techniques, storage and marketing of products. Production amount and quality of other fruit species should be improved as succeeded in apple.

The biggest problem in apple production in Karaman is low yield. Reasons for this can be young apple gardens or gardens containing old or classical apple trees in many gardens. Modern growing methods, new pruning and shaping systems are required to improve yield. Also, iron and zinc deficiencies have been seen due to basic and limy soil conditions. Therefore, supporting soils with organic matter and fertilizing plants with mineral fertilizers may help solving the problem.



Most of apple fruits are stored in cold rooms and marketed later. Capacities of cold rooms in Karaman can not fill the need. Needed Cold room capacity in Karaman is about 200.000 tons. Cold rooms especially containing scaling and packaging equipments will be required in near future when possible increases in apple production is considered in Karaman. Marketing strategies and brand value is as important as product quality for success in marketing. Therefore, apples should not be sold on the trees. Apples should be scaled and packed in certain standarts before selling. Establishing commercial exchange and growing unions are important for sustainable marketing. Fort his purpose, one of the important investment areas is to set research and counselling companies.

Other fruit species are also important for making Karaman an important fruit productin center. Among those pear, cherry, sour cherry, almond and walnut are the most attracting ones because of exporting potentials. Pear has price advantages in the market but resistant varieties must be planted due to Erwinia disease (*Erwinia mylovora* Burill).

Cherry is a fruit that Turkey has become a brand. Export potential of cheryy is accepted as 100.000 tons but we can only supply about 50 % of it. Karaman has a potential of providing good quality cherries with high dry matter due to having more sunny days and higher temperature differences between day and night. Especially, cherries in upper places of Karaman could mature later than cherries of some important cherry growing regions, so this brings an advantage of marketing with beter prices. This also helps cherry exporters to supply cherry for the market in a longer periods of time. Based on the 2013 statistics, Karaman produces 12.000 tons of cherry. However, number of young cherry trees not giving fruits yet is 205.210 in Karaman and this almost 60 % of the total tree numbers. This data shows that growers of Karaman gives the importance cherry deserves. Sour cherry is another important fruit for fruit juice industry in Karaman and can be grown on the calcareous soils.

Walnut and almond are fruit species which is easy to sell for growers. Production of these two fruits is not enough and they are imported to fill the need. In addition, public lands are allocated to farmers to grow these fruits. In 2012, Karaman produced 3.774 tons of walnut and 1.877 tons of almond. Newly established gardens of walnut and almond which are not giving fruits yet are around 45 % and 60 %, respectively. Quince is produced about 265 tons in Karaman and is another fruit species that can be considered in fruit production pattern.

Our society can be considered as conservative in terms of consumption habits, thus well known fruits and products are accepted and used easily but newly introduced fruits or products are not. That is why drying and packaging well known fruits may be an important investment area for Karaman. Fruit juice industry and pectic or thin sheet of sun-dried fruit pulp productions are other investment possibilities.







## VITICULTURE

Table 22 shows grape production amount of Turkey and Karaman. Statistical data about grapes in Turkey is given under the titles of fresh-used, dried and for wine production. Karaman produces 56.484 tons of grape and it corresponds to about 1,4 % of total production of Turkey. Most of the grape is produced at the central region of the city and at Ermenek town.



**Table 22.** Production amounts of grape in Karaman and Turkey and proportional value of Karaman in 2013

Usage	Karaman (Ton)	Turkey (Ton)	Proportional value of Karaman (%)
Fresh consumption	29.308	2.132.602	1,37
Dried grape	22.111	1.423.578	1,55
Grape for wine	5.065	455.229	1,15
Total production	56.484	4.011.409	1,40

**Source:** TUIK, 2013

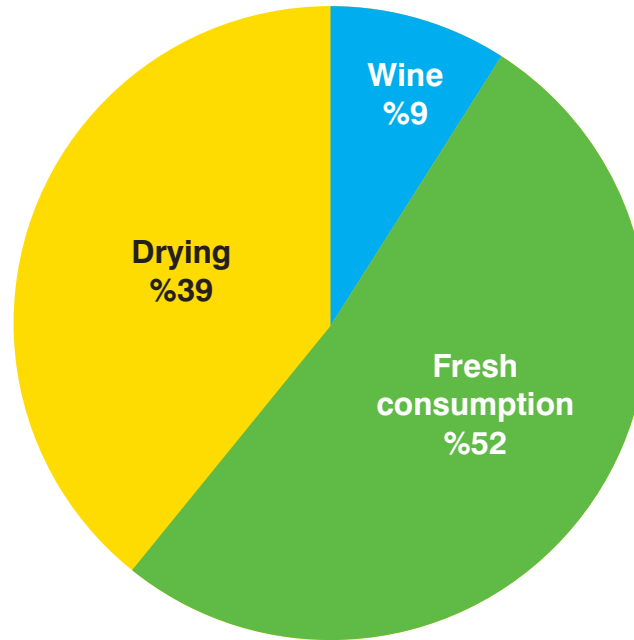


Due to low relative humidity, less pesticides are used for viticulture in Karaman. Grape is usually grown at the upper places of Karaman where freezing risk is minimum. Ekşikara is the first reminded variety when grape is thought. This variety is grown for its dried-fruits. Ekşikara is consumed as a dried-fruit due to its taste, quality and special features of its seeds.





Percentages of grape usage areas



Other common grape cultivars grown in Karaman are Esebalı, Akdimrit and Karadimrit. Akdimrit and Karadimrit are used for wine production, but in recent years their planting area is decreased. In addition, a successful example of grape farming can be the production of Alphonse cultivar grown in Aybastı village. This cultivar is marketed very easily due to its high fresh consumption quality (Department of Food, Agriculture and Livestock of Karaman).

Karaman is an ideal region for grape farming due to its good climatic conditions. It has well known grape cultivars and this may provide an opportunity for establishing special brands. Additionally, incidence of grape diseases is very low in Karaman and this situation can make organic farming investment easier and more profitable. Grape seed capsules are another important product for health considerations. Ekşikara cultivar has advantages in the production of seed capsules because of number and rigidity of its seeds. Grape juice is also an important part of fruit juice industry.



## VEGETABLE PRODUCTION

Vegetable production amounts of Karaman and Turkey are given in Table 23. Statistics of vegetables are usually gathered under three main subjects as root and tuber vegetables, fruitfull vegetables and other vegetables. According to 2013 data, Karaman provides about 1.34 % Turkey's total vegetable production. The biggest production was from fruitfull vegetables with 292.633 tons while the biggest proportion in Turkey's total production was obtained from other vegetable class with 2,28 %.

**Table 23.** Vegetable production values of Karaman in Karaman

Vegetable classes	Karaman (Ton)	Turkey (Ton)	Proportion of Karaman in Turkey's Total Production (%)
Root and tuber vegetables	50.065	3.187.276	1,57
Fruitfull vegetables	292.633	23.514.578	1,24
Other vegetables	39.879	1.746.364	2,28
Total	382.577	28.448.218	1,34

**Source:** TUIK, 2013





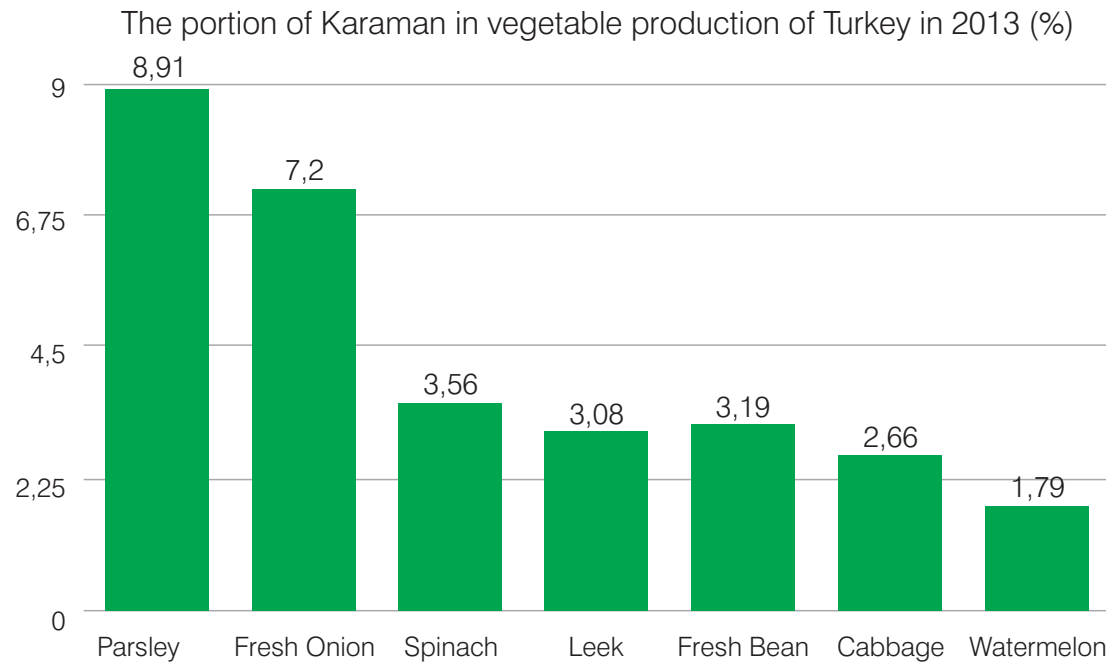
Table 24 shows the production values of some vegetables in Karaman and Turkey. Karaman provides about 1.3 % of total production of vegetables given in the table. The biggest support to Turkey's vegetable production is given by parsley with 8.9 %. Green onion, spinach, leek, green bean, cabbage and lettuce follow parsley. Watermelon, melon, tomatoes for paste and cucumber have also over 1 % proportion.

**Table 24.** Some vegetable crop species grown in Karaman and Turkey and proportional values of Karaman in total production of Turkey

Vegetables	Karaman (Ton)	Turkey (Ton)	Proportional value (%)
Parsley	5.134	57.619	8,91
Onion (Green)	11.057	153.478	7,20
Onion (Dry)	18.250	1.904.846	0,95
Spinach	7.842	220.274	3,56
Leek	7.405	240.391	3,08
Cabbage	16.916	635.193	2,66
Lettuce	9.652	436.785	2,20
Bean (Green/Fresh)	20.199	632.301	3,19
Watermelon	69.870	3.887.324	1,79
Melon	23.844	1.699.550	1,40
Cucumber	30.151	1.754.613	1,71
Tomato	47.829	7.941.780	0,60
Tomato (Paste)	58.847	3.878.220	1,51
Pepper	17.849	2.159.348	0,82
Total	344.845	25.601.722	1,34

**Source:** TUIK, 2013





Vegetable farming in Karaman was not developed well because of increase of moving from villages, intensive labor for vegetable production and closeness of Karaman to cities which are important vegetable producers. Vegetables are generally grown around Göksu valley with mild climate. Çatak, Bucakışla, Bostanözü, Çukur, Cerit, İhsaniye, Topalhacı ve Kurucabey villages which have borders with Göksu Valley have potential of greenhouse farming. That is why the Department of Food, Agriculture and Livestock of Karaman has built 4.000 square meter climatically controlled greenhouse in Bostanözü villlage. In addition, aroun 6.500 square meter greenhous was established in Karaman as well.

Organic vegetable production could be another advantage for Karaman which has good conditions for organic farming. Especially, some specialized crops to Karaman have good chance for organic production and can become into a brand. Some of these crops or cultivarsa are Morcali dry onion, Çukurbağ garlic, Süleymanhacı melon, Kazımkarabekir watermelon, Kızılkuyu pumpkin seed, Zengen potato and Ermenek pink tomatoes. Increasing production and marketing these products may obtain good advantages for farmers in the region.

Homemade paste and milled dry fruits are other important habits of people in Karaman. Therefore research and development studies towards this aim would be encouraging farmers for growing vegetables. In addition, drying under good conditions and packaging after milling of vegetables and fruits can be a good investment area for Karaman.







## GREENHOUSE FARMING

Plant production in greenhouses are usually done in cities with mild climate in Turkey. Karaman, in general, is not suitable for greenhouse farming due to climatic conditions, but small amount of greenhouse production of certain crops have been done in some villages next to Göksu Valley. Greenhouse production in these villages can be profitable if production is planned to produce and market vegetables after the growing season in coastal region is over. For this purpose, salad materials are especially preferred.

Based on 2013 data, six million tons of greenhouse vegetable production have been achieved and mostly cucumber, tomato and watermelon were produced. In Karaman, on the other hand, 128 tons of vegetables were produced in 15 da greenhouses (TUIK, 2013).





## ORGANIC FARMING

Karaman has an important potential of organic farming due to having towns with different ecological conditions, possibility of obtaining high quality products, less incidence of plant diseases and rich genetic resources.

Grape is one of the crop species grown organically in about 3.200 ha area in Karaman. Approximately 1.000 tons of organic grape were produced in Karaman according to producer reports (Department of Food, Agriculture and Livestock of Karaman). In addition. About 20 honey producer produce organic honey in 200 beehive in the towns of Central Province, Ermenek and Sarıveliler. Moreover, eight farmers grow organic medicinal and aromatic plants in 220 da area in Ermenek and Sarıveliler towns.

Good Agricultural Practices (GAPs) are another important agricultural application where organic farming is not possible. Table 25 shows the crops produced through GAPs, their plantations and production amounts in Karaman.

**Table 25.** Crops produced through GAPs, their plantations and production amounts in Karaman

Product name	Location	Plantation (da)	Production Amount (ton)
Apple	Merkez	7.229	23.500
Apple	Ayrancı	2.077	7.012
Pear	Merkez	264	500
Cherry	Merkez	139	55
Cherry	Ayrancı	212	106
Sour Cherry	Ayrancı	50	25
Barley	Ayrancı	1.841	773

**Source:** Department of Food, Agriculture and Livestock of Karaman





Organic farming is important for preserving soil as well as healthy foods. Organic material content is a very important factor for soil productivity and soil preservation. Soil organic matter has an important effect on water holding capacity, soil temperature, use of plant nutrition, increasing cation exchange capacity, living of soil creatures and increasing soil fertility.

Organic matter ratio is less than 1% in Karaman, therefore increasing soil organic matter capacity is very important. This is a vital issue for Karaman's agricultural future and is a good investment area as well. Another investment area for organic farming is the production of seeds of local varieties (land races) specialized to Karaman. Especially, organic farming products used as baby and kid foods can be attracting investment areas.



## ANIMAL HUSBANDRY

39.7 % of population of Karaman have been employed in agriculture. Animal husbandry has a historical and cultural background in the city, but Karaman is not at a level it could be. In 2012, Karaman was 63th among 81 cities with the value of living animals of 378 million TL and 0.59 % ratio while it was 68th with the value of animal products of 100 million TL and 0.20 % ratio (TUIK, 2012). Low numbers in animal production are not imperfection of growing conditions but results of not using full capacity of the city. Moreover, it is required to inform growers for recording and selection of stud animals. Tablo 26 gives information about grower union for animal breeding, agricultural producers union and their member numbers.

**Table 26.** Grower union for animal breeding, agricultural producers union and their member numbers of Karaman

Union Name	Number of Member
Stud cattle producer union	875
Bee producer union	415
Stud sheep-goat producer union	2.945
Egg producer union	20
Milk producer union	1.605





This table is important in putting conscious growers forward but at the same time, it should not be forgotten that growers have to enroll more than one grower unions or cooperatives to get government supports. To show the potential of animal husbandry of Karaman, improvements in stud animal, trained sheperd, organization, education, developments in technical and health issues are required.

## **SMALL RUMINANT HUSBANDRY**

For increasing animal production, small ruminanat raising has an important place because of traditional growing and consumption habits of Turkish people and suitability of geographic conditions. Small ruminanat raising in Karaman has a historical basis due to Karaman sheep and goats which are usually grown in the mountains in transitional zones between Karaman and Mediterranean. Akkaraman and Anatolian Merinos sheeps and hairy goats are commonly grown in Karaman.

Because of inducements given to animal growers by governmental sources, sheep and goat numbers increased 3,15 % and 9,88 %, respectively. During this period, number of Merinos sheep increased from 4.127 to 108.694 whereas number local sheep race decreased about 26,06 % Table 27. Similar thing happened in the numbers of hairy goat and angora goat with 11,96 % increase and 5,18 % decrease, respectively. Karaman provides 1,36 % and 1,34 % portion of Turkey's total sheep and goat production, respectively. However, when merinos sheep and angora goat were considered, these ratios increase up to 7,09 % and 7,42 %, respectively. Reasons for this situation could be breeding merinos sheep in the region, feeding capacity and decrease in the desire for fat-tails. On the other hand, carpet and rug textile efforts are still very common in the region and this may cause for holding angora goat in production system.

Distribution pattern of sheep in Karaman is very dispersed, and Central province and Ayrancı provide 94,49 % of total sheep numbers. Sheep stocks are 61 % merinos in the Central Province and 99,45 % local sheeps in Ayrancı. 64,16 % of goats are also produced in the Central Province. Ermenek is another town coming forward in goat production with 22,61 %. Portion of Angora goat out of total goat presence is about 10,46 % and most of them (92,03 %) are grown in the Central Province and the rest is in Ayrancı.







**Table 27.** Number of small cattle in Karaman and proportion in total small cattle of Turkey

	Sheep		Goat		Milk (ton)	Wool/Hair/ Angora (ton)
	Merinos	Local	Hairy	Angora		
TUIK data of 2012						
Turkey	1.532.651	25.892.582	8.199.184	158.102	1.376.436,00	54.950,00
Karaman	108.694	264.194	100.419	11.728	18.372,51	902,16
Proportion (%)	7.09	1,02	1,22	7,42	1,33	1,64
Distribution of small cattles to the towns in 2012						
Central Province	105.163	67.234	61.161	10.793	8.774,04	489,34
Ayrancı	990	178.968	4.558	935	7.473,74	356,64
Başyayla	-	532	2.592	-	162,34	2,14
Ermenek	-	8.773	25.351	-	1.338,07	26,88
Kazımkarabekir	2.498	6.556	3.245	-	414,10	21,70
Sarıveliler	43	2.131	3.512	-	210,22	5,46
2013 Data of Department of Food, Agriculture and Livestock						
Karaman	130.901	241.158	124.872	13.111	-	-

Sheep growing farms are generally small and middle size in Karaman. Use of technological instruments is also low. However, Department of Food, Agriculture and Livestock and small cattle growers union together have started a breeding program at grower conditions. In this projects, Akkaraman, Anatolian Merinos and hairy goat stocks have been bred in 191 corporations in the towns of Central Province, Ayrancı and Kazımkarabekir. This may bring momentum to small cattle growing in the city.

Proportion of milk production from small cattles in Karaman is about 1,33 % of Turkey's total production. Sheep milk is usually used to produce yogurt and cheese and provide about 20-40% of total salaries. Milk yield is lower than what it is expected because of difficulties of finding trained shepherd, low yield, mechanization deficiencies and milking efforts requiring intensive labor. Projects prepared to improve this situation could improve salaries of growers.



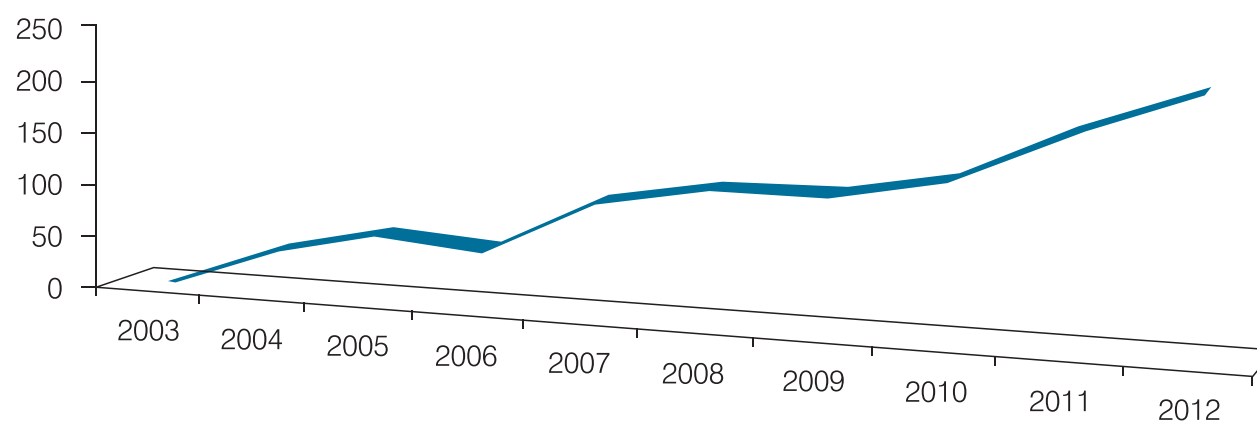
## CATTLE HUSBANDRY

Increase in cattle number has been 41 % in Turkey but it has been 233 % in Karaman. This general increase rate is a result of 419 % and 133 % increase in culture stock and hybrid cattle, respectively, but 8 % decrease in local stock (Figure 12). This situation indicates that investment in cattle husbandry and stud quality are increased. Portion of Karaman in culture cattle stock of Turkey is about 0,56 % and this is a very low value (Table 28). Based on 2012 data, there were 69 buffalo in Karaman and this does not have an economical meaning.

**Tablo 28.** Number of great cattle in Karaman and proportion in total great cattle of Turkey

	Cattle (Culture)	Cattle (Culture)	Cattle (Culture)	Buffalo	Milk (Ton)
<b>TUIK data of 2012</b>					
Turkey	5.679.484	5.776.028	2.459.400	107.435	16.024.826.00
Karaman	31.732	19.085	1.241	69	61.163,94
Proportion (%)	0,56	0,33	0,05	0,06	0,38
<b>Distribution of great cattles to the towns in 2012</b>					
Central Province	21.366	10.036	971	-	35.107.51
Ayrancı	6.214	1.875	33	69	11.118,52
Başyayla	-	1.255	-	-	1.325,66
Ermenek	2.248	2.248	88	-	5.182,37
Kazımkarabekir	1.797	262	-	-	4.349,88
Sarıveliler	107	3.409	149	-	4.080,01
<b>2013 Data of Department of Food, Agriculture and Livestock</b>					
Karaman	35.626	20.856	1.385	54	-





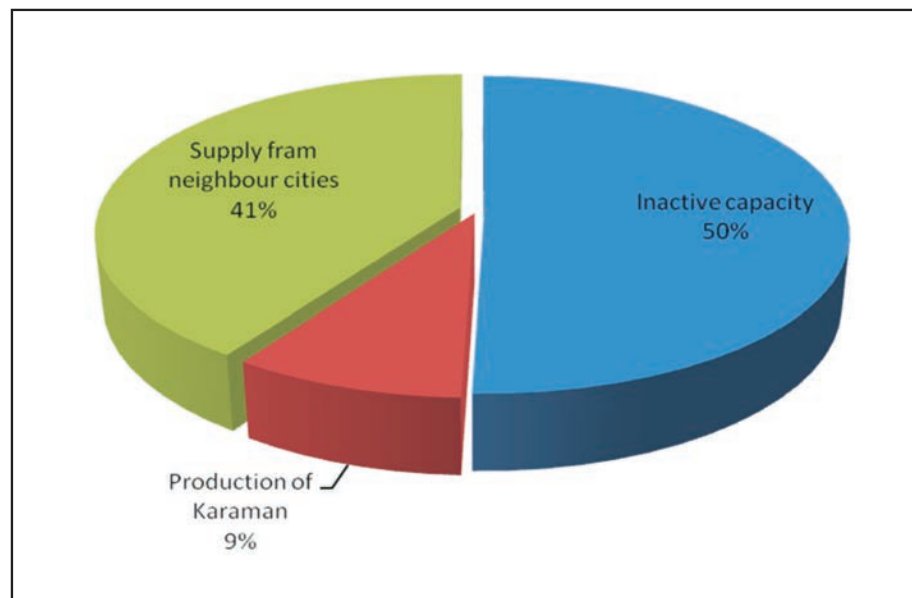
**Figure 12.** Changing ratio of great cattle numbers of Karaman between 2002 and 2012





62 % of total cattle number of Karaman are grown in the Central Province while 15,7 % of it are grown in Ayrancı. Ermenek and Sarıveliler are third and fourth with 8,8 % and 7 % in great cattle husbandry, respectively. Milk production per year is 3.168 liter in Karaman and this is over Turkey's average production which is 2.942 liter.

Based on the Department of Food, Agriculture and Livestock of Karaman, daily milk processing capacity of industry in Karaman is about 1161.6 tons and this value is going to be 2511.6 tons when new milk businesses start working. Right now, the daily milk production of Karaman is 190 tons, therefore most of milk is imported from neighbour cities. With gathered total süt amount, only 49,5 % of processing capacity are active, and more than 50 % are inactive (Figure 13). With new milk processing companies this value will decrease to 23.3 %. Therefore, husbandry capacities of farms must be increased to obtain more milk because there is no marketing problem in Karaman.



**Figure 13.** Use of capacity potentials of milk processing companies



To reach targets in growing cattle for milk, organization, administration, finance, housing, feeding and health services must be improved. Also, high quality feed must be obtained for better animal husbandry. Silage usage, instead, has been increased in recent years. This has positively affected animal husbandry for milk. Some cautions should be taken for growing drought tolerant feeding crops.

A new project called “Agricultural Organized Industrial District for Dairy Cattle Depending” will start in 2014. There will be 13.000 cattle totally, and 5.250 of them will be milked. This will be the first in Turkey and create new opportunities.





## POULTRY FARMING

Portion of Konya-Karaman TR52 Region in chicken for egg number of Turkey is 13, 8 %. Karaman alone has 11,25 % portion in the TR52 Region while it has 1,51 % portion of total value of Turkey (Table 29). This is an important ratio and shows that this sector is very suitable for improvement.

Feeding chicken for meat has not been done in Karaman because there is no poultry slaughterhouse in Karaman. Therefore, poultry slaughterhouses should be established in Karaman for growing chicken for meat. Number of other poultry is very low in Karaman. Intensive poultry farming is done in the Central Province, Başyayla and Kazımkarabekir towns. Moreover, Karaman has a good potential for growing organic poultry due to its location and structure. In addition Ermenek Dam is a good place to grow ducks and geese. Other towns with large and flat pastures may have a potential of Turkey feeding.

**Table 29.** Number of poultry in Karaman and proportion in total poultry of Turkey

	Chicken for egg	Turkey	Duck	Goose
Turkey	84.677.290	2.760.859	356.730	676.179
Karaman	1.274.591	4.013	924	1.347
Proportion (%)	1,51	0,15	0,26	0,20
Central Province	1.193.743	2.000	193	455
Ayrancı	6.233	1.170	418	637
Başyayla	22.470	-	10	-
Ermenek	6.150	15	43	-
Kazımkarabekir	41.350	773	247	245
Sariveliler	4.645	55	13	10

**Source:** TUIK 2012



## APICULTURE

Karaman is a geed location for apiculture due to having wide pastures and plateaus with rich flower sources and being close to wintering places in the Mediterranean Region. However, changing precipitation regime depending upon years affect apiculture negatively. On the other hand, Karaman attracts mobile apiarists during spring months and provides advantages for seed producers. Karaman's contribution to Turkey's honey production is 0.74 % and to bee wax production is 1.16 % (Table 30).

Karaman Apiarist Union plans to establish a honey packaging company with 2000 kg capacity and to operate it under the brand name of “Karbir” in 2014. Union help their members for polination. They have pollinated about 17000 beehives in 2013. With its advantages geografic conditions, Karaman is a very suitable region for apiculture investments.

**Tablo 30.** Number of beehives, production of honey and beewax, and proportional value in Turkey's bee population

	Number of Beehives	Honey Production (ton)	Beewax Production (ton)
Turkey	6.348.009	89.162	4.222
Karaman	44.444	657	49
Proportion (%)	0,70	0,74	1,16
Central Province	20.687	322,19	19,00
Ayrancı	9.583	162,91	19,55
Başyayla	1.268	15,12	1,26
Ermenek	4.830	53,13	4,00
Kazımkarabekir	443	4,60	0,08
Sarıveliler	7.633	98,57	5,24

**Source:** TUIK, 2012



## AQUACULTURE PRODUCTS

Karaman provide 0,28 % of internal water fishes of Turkey. This is a very low value and related to water sources of Karaman. Based on Table 31, production portion of carp, siraz and catfish changes between 0.5 % and 0.92 %. Efforts have been done to improve aquaculture production in Karaman by the Department of Food, Agriculture and Livestock of Karaman. During these studies, about 1.822.000 juvenile carps were left into Ayrancı and Gödet lakes between 2003 and 2013. In additon, 30.000 juvenile carps were left into Central Province, Taşkale and Ayrancı ponds in 2013. Only, trouts were grown in Karaman and its portion is 1.41 % in Turkey's total production. About 2668 tons of trout and 54.000.000 juvenile traouts were produced in Karaman in recent years. Ermenek Dam and KOP projects provides oppurtunities for fishery investments in the city.

**Table 31.** Internal water fish capacity of Karaman and proportional valies in Turkey's total production

	Karaman	Turkey	Proportional value (%)
<b>Grown Fish Species</b>			
Trout	1.640,00	111.216,00	1,47
Carp	-	170,00	-
Total with other species	1.640,00	111.557,00	1,47
<b>Fished Species</b>			
Carp	92,00	9.973,00	0,92
Siraz	3,00	602,50	0,50
Catfish	6,00	816,00	0,74
Total with other species	101,00	36.120,00	0,28

**Source:** TUIK, 2012



## **AGRICULTURAL MECHANIZATION**

Agricultural mechanization include agricultural equipments and machines, pressured irrigation systems and new-agriculture Technologies and all of these areas offer investment oppurtunities.

### **AGRICULTURAL EQUIPMENTS AND MACHINES**

Some of agricultural equipments and machines used in Karaman are given in Table 32. Based on the data, usually traditional equipments and machines are used in Karaman but modern combined sowing or harvesting machines are low in numbers. This indicates that there is aneed for modern tachnological equipments and machines in Karaman and this area may be an important investment business oppurtunity. Another advantage of Karaman for this investment oppurtunity is that there is a well organized industrial zone in Karaman and labor is relatively cheaper.

Soil is the most important entity of agriculture, so it needs to be saved and used properly for sustainable agriculture. Unfortunately, farmers in Karaman are not very conscious about soil preservation issue, as a result, when the table 32 is carefully analyzed, it is seen that there are not enough number of soil preserving machines in Karaman. Therefore, farmers should be informed about this problem. After that, machines related to soil preservation would be bought more by farmers. This is required for a long term high yielding crop production. In addition, classification and packaging of agricultural products are other important subjects for better marketing. Therefore, this issue is also carefully considered and invetments in this area should be supported.



**Table 32.** Some agricultural equipments and machines used in Karaman

Equipment/Machines	Number
Combine	135
Tractor	10.369
Ear plow	11.183
Disk plow	926
Rotovator	2.460
Cultivator	8.082
Disk raker	1.442
Seeder pulled by a tractor	4.672
Combine seeder	5.869
Pnomatic seeder	567
Universal seeder (including sugar beet)	100
Sowing machine into stubble	8
Distribution machine for farm fertilizer	10
Sap parçalama makinesi	34
Rock collection machine	11
Potato harvester	2
Beet harvester	1.290
Combine beet harvester	256
Silage machine	95
Corn silage machine	224
Corn harvester	25

**Source:** Department of Food, Agriculture and Livestock of Karaman, 2013



**Tablo 32.**

Equipment/Machines	Number
Soil levelling machine	605
Deep digging	126
Setting machine	12
Sprinkle irrigation system	13.213
Drip irrigation system	5.519
Cream machine	4.313
Milking system	27
Mobile milking machine	1.157
Feed preparation machine	167
Chemical fertilizer distribution machine	8.570
Rototiller	2.320
Drying machine for products	2
Product classification machine	10
Feed distribution trailer	19
Scoop	136

**Source:** Department of Food, Agriculture and Livestock of Karaman, 2013



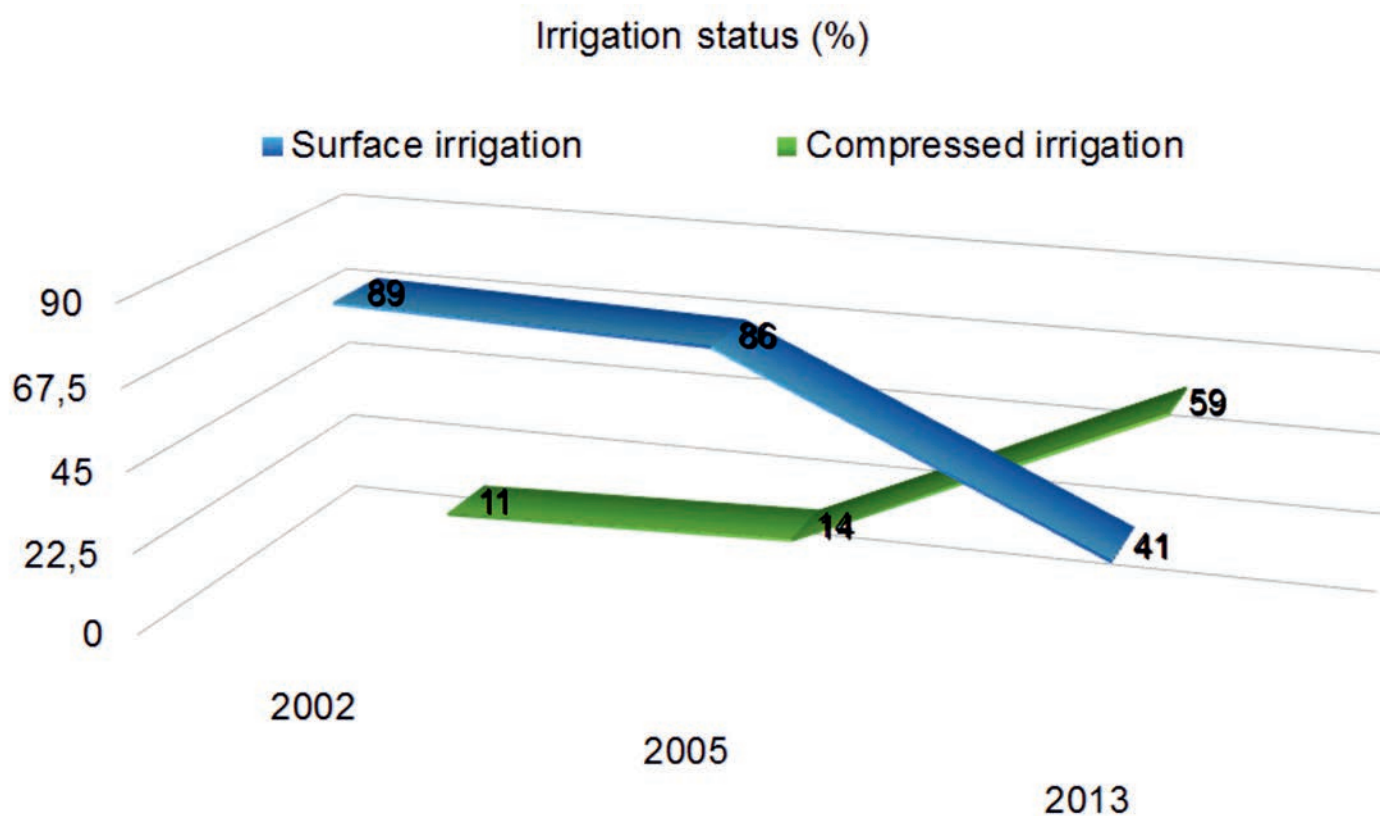
## PRESSURED IRRIGATION SYSTEMS

The most important issue for Karaman, today and tomorrow, is effective irrigation and preserving water resources for future by programming watering system carefully. Generally, underground water is used in irrigation in Karaman. Moreover, evaporation is very high in Karaman because soil organic matter and relative humidity are very low and this causes high evaporation from soil and plants.





In Karaman, 96.058 ha land out of total 346.848 ha agriculture land can be irrigated. This accounts for 27 % of the total land. Most of these lands are irrigated by underground water by pressured irrigation systems. This situation lowers water table very quickly in Karaman and endangers the future of agricultural productions. Surface watering was about 89 % in 2002 but it decreased to 41 % in 2013 and pressured watering increased to 59 % (2013 working report of Department of Food, Agriculture and Livestock of Karaman). There are 13.213 sprinkle irrigation system and 5.519 drip irrigation system in Karaman based on 2013 statistics. Inducements for effective irrigation systems have being continuing in Karaman.





Improving soil's physical and chemical properties is as important as effective irrigation practices. Therefore, soil improvement should be taken into consideration along with good watering and programming. Another important thing is the selection of crops having higher water-use efficiencies. Erosion, removal of plant nutritional elements and water pollution are not avoidable if irrigation is not programmed well.

The highest effectiveness is gotten from micro watering system which is under-soil drip irrigation system. Especially, when this and other irrigation systems are combined with humidity detecting sensors, effectiveness reaches the highest point. Due to all of these factors mentioned above, Karaman is a very attractive place for watering companies to make investments for irrigation systems.





## **POSSIBILITIES OF USING NEW AGRICULTURAL TECHNOLOGIES**

Important developments in agricultural technologies have been happened paralel to improvements in the production of information and technology. Agricultural technology aims mainly to increase yield and quality, to decrease production costs and risks, to protect environment and to increase shelf-life of products.

Mechanical new technologies contain new inovations in agricultural machines. New generation machines are usually highly automatic, consuming less energy, environmentally friendly and computerized to use necessary information. All these make farmers works easier and better yielding.

Biologic new technologies contain mainly plant breeding and biotechnology. Especially modern biotechnology and breeding techniques help breeders to improve crops for better yield, quality, adaptation to biotic and abiotic stresses, suitability to new generation machines and production systems. This issue is specifically important for Karaman because it has a very improved agricultural industry and their needs for good raw material can be supplied with genetically improved crop species.

Following developments in fertilizer and pesticide technolgy is also important for environmentally friendly production. This is required to decrease pollution and obtain better crops with less expenses. Therefore, farmers should be informed frequently for better and more profitable crop production. This will also protect environment and soil as well.



## OFFERABLE GOVERNMENTAL PROPERTIES FOR INVESTORS IN KARAMAN

The list showing governmental properties over 200.000 square meters on which investments can make in the Central Region of Karaman

NO	NUMBER	DIS./ VILLAGE	POSITION	SECTION	ISLAND	PARCEL	SURVEY(m <sup>2</sup> )	CHARACTERISTIC
1	70010109753	Eğilmez Köyü	Köycivarı	8		1044	294,000,00	Tarla
2	70010106778	Burunoba Köyü	Kalaycık	20		703	208,000,00	Tarla
2	70010123531	Burunoba Köyü				760	208,796,96	Harman Yeri
2	70010123535	Burunoba Köyü			174	1	1,726,372,48	Tarla
2	70010123536	Burunoba Köyü			175	1	590,359,67	Tarla
2	70010123537	Burunoba Köyü			177	1	1,792,149,99	Tarla
2	70010123538	Burunoba Köyü			180	1	318,208,21	Tarla
2	70010123539	Burunoba Köyü			181	1	285,564,91	Tarla
2	70010123545	Burunoba Köyü			190	1	173,111,38	Tarla
2	70010123546	Burunoba Köyü			191	1	246,078,15	Tarla
2	70010123566	Burunoba Köyü			254	2	1,288,519,26	Tarla
2	70010123570	Burunoba Köyü			261	1	258,284,23	Kanal
3	70010100773	Akçaşehir Köyü		N30.b2b3b		3155	1,371,000,00	Ham Toprak
3	70010100799	Akçaşehir Köyü	Samaylı	N31.a1.Ild		4211	696,877,00	Tarla
3	70010123495	Akçaşehir Köyü		N30-b-09-a	279	4	264,349,00	Tarla
3	70010123524	Akçaşehir Köyü		M30-c-25-d	470	1	694,648,00	Drenaj Kanalı
4	70010120582	Osmaniye Köyü			175	1	206,178,00	Tarla
5	70010100141	Kırbağı Mahallesi	Abacı		389	1	267,402,00	Arsa
5	70010100212	Kırbağı Mahallesi	Kocadüz		395	6	211,361,00	Arsa
5	70010100247	Kırbağı Mahallesi	Kocadüz	N30.c1.111.a	397	2	397,252,00	Arsa
5	70010100335	Kırbağı Mahallesi	Kocadüz	N30-C1-Ild-IIIa	1347	101	1,363,736,00	Arsa
5	70010100336	Kırbağı Mahallesi	Kocadüz		1347	102	983,076,00	Arsa
5	70010100573	Siyaser Mahallesi	Şarözü		1759	108	2,000,000,32	Arsa
5	70010100579	Siyaser Mahallesi	Şarözü		1759	115	510,959,00	Arsa
5	70010100580	Siyaser Mahallesi	Şarözü		1759	116	510,993,00	Arsa
5	70010100581	Siyaser Mahallesi	Şarözü		1759	117	511,057,00	Arsa
6	70010110766	Güldere Köyü	Kadın Çalı	03.a.b.05.b	135	474	438,000,00	Ham Toprak
6	70010110887	Güldere Köyü	Ernek	03.a.b.05.b	160	220	257,500,00	Ham Toprak
6	70010110902	Güldere Köyü	Bağyakası	03.a.b.05.b	160	341	481,000,00	Ham Toprak
7	70010114209	Lale Köyü	Döğüşkuyusu	7		1814	293,600,00	Ham Toprak
7	70010114210	Lale Köyü	Döğüşkuyusu	7		1815	310,500,00	Ham Toprak
7	70010114212	Lale Köyü	Döğüşkuyusu	7		1838	276,700,00	Ham Toprak
8	70010115023	Medreselik Köyü	Söğüt	17		2185	120,200,00	Ham Toprak



NO	NUMBER	DIS./ VILLAGE	POSITION	SECTION	ISLAND	PARCEL	SURVEY(m²)	CHARACTERISTIC
9	70010117944	Yukarı Akın Köyü	Koru	029.b.15.4	104	451	410.000.000	Ham Toprak
10	70010105153	Bayır Köyü	Koru	029.b.14.b	116	164	299.525.00	Ham Toprak
10	70010105230	Bayır Köyü	Koru	029.b.14.a	119	416	203.000.00	Ham Toprak
10	70010105231	Bayır Köyü	Koru	029.b.14.b.c	119	417	362.500.00	Ham Toprak
10	70010105443	Bayır Köyü	Yaylabağı	029.b.09.d	150	165	250.375.00	Ham Toprak
10	70010105462	Bayır Köyü	Yaylabağı	029.b.09.d	152	64	235.626.00	Ham Toprak
10	70010105468	Bayır Köyü	Yaylabağı	029.b.09.d	152	90	231.545.00	Ham Toprak
11	70010102145	Adaköy Köyü	Kayrapa		104	221	208.000.00	Ham Toprak
11	70010102289	Adaköy Köyü	Kandeğirmeni	08.c.	116	329	222.500.00	Ham Toprak
12	70010112453	Kalaba Köyü	Habilalanı	029.b.13.b	121	272	997.125.00	Ham Toprak
12	70010112456	Kalaba Köyü	Çiftlik	029.b.13.b	121	275	265.083.00	Ham Toprak
13	70010102538	Akçaalan Köyü	Bağdat	01-08B-2B	115	82	736.875.00	Tarla
14	70010110459	Göçer Köyü		N29.c.22.b	176	340	290.630.00	Ham Toprak
15	70010117434	Şihlar Köyü	Karaburun			434	208.200.00	Ham Toprak
15	70010117436	Şihlar Köyü	Yoğunlar	N29.c.11.c		459	225.900.00	Ham Toprak
16	70010108494	Çukurbağ Köyü	Akalan	N30.d.21.a	101	399	180.400.00	Ham Toprak
17	70010115607	Narlıdere Köyü	Akalan	N30.d.22.a	103	154	200.300.00	Ham Toprak
17	70010115619	Narlıdere Köyü	Gövdenyeri	N30.d.22.a	103	255	241.100.00	Ham Toprak
17	70010115640	Narlıdere Köyü	Kartın	N30.d.22.d	109	317	207.685.00	Ham Toprak
17	70010115649	Narlıdere Köyü	Gökyer	N30.d.21.c	114	301	703.200.00	Ham Toprak
17	70010115778	Narlıdere Köyü	Göl	030.d.21.c	204	84	417.800.00	Ham Toprak
17	70010115852	Narlıdere Köyü	Mengik	030.a.02.a	211	336	417.000.00	Ham Toprak
17	70010115856	Narlıdere Köyü	Sarnıç	030.a.02.a	211	340	370.100.00	Ham Toprak
17	70010115858	Narlıdere Köyü	Sarnıç	N30.d.22.d	211	342	1.969.200.00	Ham Toprak
17	70010115860	Narlıdere Köyü	Süpürge alanı	N30.d.22.c	211	344	428.700.00	Ham Toprak
18	70010106599	Bucakkışla Köyü	Orman	030.a.03.b	102	55	552.600.00	Ham Toprak
19	70010103092	Aybastı Köyü	Orman	030.a.03.b	102	143	354.700.00	Ham Toprak
19	70010103093	Aybastı Köyü				143	261.100.00	Ham Toprak
20	70010122042	Yuvatepe Köyü		N30-a-12-d	300	1403	225.640.00	Tarla
21	70010123138	Kisecik Kasabası				1	612.496.00	Tarla
21	70010123577	Kisecik Kasabası				3405	569.135.00	Tarla
21	70010123578	Kisecik Kasabası			283	3406	285.347.00	Tarla
21	70010123583	Kisecik Kasabası		N30-a-06-d	302	4	936.736.00	Tarla
21	70010123585	Kisecik Kasabası	NULL	N30-a-06-c	322	1	785.538.00	Tarla
21	70010123587	Kisecik Kasabası	NULL			1	1.132.076.00	Tarla
22	70010108195	Çoğlu Köyü	Keş		10	55	200.600.00	Tarla
23	70010111881	Hamidiye Köyü	Soğla			352	25.7750.00	Tarla
24	70010101260	Sudurağı Kasabası	Ağılarası			1096	211.000.00	Tarla
24	70010101347	Sudurağı Kasabası	Nebi Ören Ağılı			3669	1.096.168.00	Tarla



**The list showing governmental properties over 200.000 square meters on which investments can make in Ayrançı**

NO	NUMBER	DIS./ VILLAGE	POSITION	SECTION	ISLAND	PARCEL	SURVEY(m <sup>2</sup> )	CHARACTERISTIC
1	70020100323	Ağızboğaz Köyü	Yar çay	3D-3C		826	316.80,00	Tarla
1	70020100324	Ağızboğaz Köyü	Yeni Çiftlik	2D-C		827	295.800,00	Tarla
1	700201402354	Ağızboğaz Köyü				1235	261.963,18	Tarla
1	70020102413	Ağızboğaz Köyü				1236	2.147.703,98	Tarla
1	70020102418	Ağızboğaz Köyü				1197	206.080,90	Tarla
1	70020102421	Ağızboğaz Köyü				1206	424.976,53	Tarla
1	70020102422	Ağızboğaz Köyü				1208	259.190,65	Tarla
1	70020102426	Ağızboğaz Köyü				1220	387.673,73	Tarla
2	70020102485	Akpınar Köyü	Bacalı boğazı		111	43	420.270,00	Ham Toprak
2	70020102486	Akpınar Köyü	Andıkara		117	21	266.250,00	Ham Toprak
2	70020102487	Akpınar Köyü	Andıkara		118	1	692.000,00	Ham Toprak
3	70020102484	Çatak Köyü	Ambarıçi		119	52	1.590.800,00	Tarka
4	70020101386	Küçükkoraş Köyü	Eygen	N31C11B	102	25	436.750,00	Ham Toprak
4	70020101408	Küçükkoraş Köyü	Dikmen	N31C17A	112	29	4.119.600,00	Tarla
4	70020101437	Küçükkoraş Köyü	Arpa Korusu	N31C17C-15B-12C	119	11	198.399,00	Ham Toprak ve Kayalık
4	70020101442	Küçükkoraş Köyü	Ilgit	N31C11B-12A06C	120	54	1.549.100,00	Ham Toprak
4	70020101454	Küçükkoraş Köyü	Karaköy	N31C07D-06C-11B-12G	126	29	1.734.900,00	Ham Toprak
4	70020101456	Küçükkoraş Köyü	Köseli	N31D15C	127	12	649.100,00	Ham Toprak
5	70020101509	Pınarkaya Köyü	Sarıkoca	N31C16B	111	90	523.625,00	Ham Toprak
5	70020101536	Pınarkaya Köyü	Kaynar	N31C21B-A	121	31	232.625,00	Ham Toprak
5	70020101608	Pınarkaya Köyü	Bir Kuyulu	N31DC20C-B	124	5	286.500,00	Ham Toprak
5	70020101638	Pınarkaya Köyü	İsmail Ovası		125	102	257.625,00	Ham Toprak
5	70020102133	Pınarkaya Köyü	Başpınar		106	95	1.500.000,00	Arazi
5	70020102134	Pınarkaya Köyü	Esirik	N31B22D-22C-02A-02B	104	138	1.374.450,00	Arazi
6	70020101846	Üçharman Köyü	Obacık	N31C02B	126	81	392.300,00	Tarla
6	70020101893	Üçharman Köyü	Koraşyolu		159	1	206.600,00	Tarla
7	70020102093	Yarıkkuyu Köyü	Armudun Deresi			708	2.164.500,00	Tarla



**The list showing governmental properties over 200.000 square meters on which investments can make in Başyayla**

NO	NUMBER	DIS./ VILLAGE	POSITION	SECTION	ISLAND	PARCEL	SURVEY(m <sup>2</sup> )	CHARACTERISTIC
1	70030100060	Kirazlı Yayla Mahallesi	Burçalık	029D.05A.2	130	95	609.938,73	Ham Toprak ve Çalılık
1	70030100244	Yeni Mahalle	İmran Oğulu	029A24C2	326	89	524.852,78	Ham Toprak

**The list showing governmental properties over 200.000 square meters on which investments can make in Ermenek**

NO	NUMBER	DIS./ VILLAGE	POSITION	SECTION	ISLAND	PARCEL	SURVEY(m <sup>2</sup> )	CHARACTERISTIC
1	70040100027	Akçamescit Mah.	Kovanlık	029C13C2A	561	147	389.207,64	Ham Toprak ve Kayalık
1	70040100038	Akçamescit Mah.	Keben	029c13b1b	561	165	163.134,73	Ham Toprak ve Kayalık
1	70040100045	Akçamescit Mah.	İnsuyu		561	411	18.852.209,64	Taşlık Arazi
1	70040100574	Sandıklı Mahallesi	Akpınar	029C09B4	532	275	239.801,07	Ham Toprak
1	70040100614	Sandıklı Mahallesi	Püralice-Beldiran	029c09D-029C08B/C	532	724	26.555.152,81	Ham Toprak ve Kayalık
1	70040100651	Güllük Mahallesi	Kebenbaşı	029C13B2B	540	8	275.956,88	Taşlık ve Kayalık
1	70040100072	Ardıçkaya Köyü	Kızılalan	029C14C1B	151	10	134.774,41	Ham Toprak
2	70040103129	Güllük Mahallesi	Yayla	p29a05a2	376	33	857.208,94	Ham Toprak
3	70040103341	Aşağı Çağlar Köyü	Söğütçük	o29c02a4	304	1	228.877,81	Ham Toprak
3	70040103362	Aşağı Çağlar Köyü	Boncuk Çayır	o29c02b1	343	3	352.717,11	Ham Toprak
3	70040103373	Aşağı Çağlar Köyü	Boncuk Çayır	o29c02b2	345	95	615.678,11	Ham Toprak
3	70040103399	Aşağı Çağlar Köyü	Altıntaş	o29b21b2	403	155	881.752,87	Taşlık Arazi
4	70040100945	Güneyyurt-Aralık Mah.	Suarası		162	21	135.005,87	Ham Toprak ve Kayalık
5	70040105921	Kazancı-Çatalbadem Mah.	Yayla	P29C23C	746	1	12.209.765,29	Ham Toprak
6	70040104661	Pamuklu Köyü	Çetince	O29C12D	167	8	258.925,99	Fundalık
6	7 0040104749	Pamuklu Köyü	Çetince	O29C11G	216	1	676.939,76	Fundalık
7	70040105583	Yukarı Çağlar Köyü	İnönü	O29C02D2	169	746	251.960,64	Ham Toprak
7	70040105609	Yukarı Çağlar Köyü	Talvar	O29C02B3B	172	420	822.251,25	Ham Toprak
7	70040105684	Yukarı Çağlar Köyü	Sazkaba	O29C03A3	176	436	1.705.768,05	Ham Toprak
7	70040105692	Yukarı Çağlar Köyü	Kocatarla	O29C03D1	177	153	487.868,03	Ham Toprak

**The list showing governmental properties over 200.000 square meters on which investments can make in Sarıveliler**

NO	NUMBER	DIS./ VILLAGE	POSITION	SECTION	ISLAND	PARCEL	SURVEY(m <sup>2</sup> )	CHARACTERISTIC
1	70060100541	Adiller Mahallesi	Çetince (çaşırılık)	029-d-08-c-2	148	284	7.896.605,06	Ham Toprak
1	70060100542	Adiller Mahallesi	Çetince (çaşırılık)	029-d-08-b	148	285	4.660.192,74	Ham Toprak
2	70060100922	Çevrekavak Köyü	Kırarası	029-d08-c-3	124	41	238.894,19	Ham Toprak
3	70060101633	Göktepe Cumhuriyet Mah.	Meydan	029d13adc	101	150	325.164,71	Ham Toprak
3	70060101296	Göktepe Cumhuriyet Mah.	Düven Kaya	029-d-17-b-3	217	10	531.639,94	Hali Arazi
3	70060101309	Göktepe Cumhuriyet Mah.	Tekneli	029-d-17-b-2	219	38	1.891.831,73	Ham Toprak
3	70060101441	Göktepe Cumhuriyet Mah.	Kekikli Alan	029-d-19-d-1	257	1	420.543,00	Ham Toprak
3	70060102972	Göktepe Cumhuriyet Mah.	Ardıçarası	o29d18c2	174	79	425.576,51	Hali Arazi
4	70060101971	Uğurlu Köyü	Yassıgır	o29d09c4	159	105	105.452,20	Ham Toprak



## COMMUNICATION INFORMATIONS

### **Karaman Governor's Office**

Adress:Sakabaşı Mahallesi, No:206, Merkez / KARAMAN

Tel:0 (338) 226 70 00

Faks:0 (338) 226 70 74

Web:www.karaman.gov.tr

E-mail:karaman@icisleri.gov.tr

### **The Office of the Mayor of Karaman**

Adress:Kirişçi Mahallesi, Atatürk Bulvarı, No:79, Merkez / KARAMAN

Tel:0 (338) 4442570

Faks:0 (338) 2264172

Web:www.karaman.bel.tr

### **Presidency of Provincial Administration of Karaman**

Adress:Üniversite Mahallesi, İbrahim Öktem Bulvarı, No:136, Merkez / KARAMAN

Tel:0 (338) 226 15 00

Faks:0 (338) 226 16 00

Web:www.karamanozelidare.gov.tr

### **Investor Consultancy Office of the Department of Food, Agriculture and Livestock of Karaman**

Adress:Eskişehir Yolu 9. Km, Yeni Bina, 14.Kat, Lodumlu / ANKARA

Tel:0 (312) 258 84 52 0 (312) 258 84 09

Faks:0 (312) 258 85 16

Web:www.taryat.gov.tr

E-mail:taryat@tarim.gov.tr

### **Department of National Estate**

Adress:İmaret Mahallesi, Mehmetbey Caddesi, Merkez / KARAMAN

Tel:0 (338) 214 04 05

Faks:0 (338) 213 72 96

Web:karamandef@maliye.gov.tr



### **General Management of Inducement Application and Foreign Capital of Ministry of Economy**

Adress:Yönü Bulvarı, No:36, Emek / ANKARA

Tel :0 (312) 444 63 63

Web :www.ekonomi.gov.tr

E-mail:tesvik@ekonomi.gov.tr

### **Department of Food, Agriculture and Livestock of Karaman**

Adress:Cumhuriyet Mahallesi, 703. Sokak, No:15, Merkez / KARAMAN

Tel :0 (338) 213 15 05

Faks :0 (338) 213 49 80

Web :www.karamangth.gov.tr

E- mail :tarim@karamantarim.gov.tr

### **Agriculture and Rural Development Support Institution**

Adress:Turan Güneş Bulvarı, No:68, Çankaya / ANKARA

Tel :0 (312) 409 14 00

Faks :0 (312) 439 47 11

Web :http://www.tkd.gov.tr/

### **Karaman City Coordination of Agriculture and Rural Development Support Institution**

Adress:Yunuskent Mahallesi, Alparslan Türkeş Bulvarı, No:2, Merkez / KARAMAN

Tel :0 (338) 217 20 00

Faks :0 (338) 217 40 00

Web :http://karaman.tkd.gov.tr/

### **Mevlana Development Agency**

Adres :Medrese Mahallesi, Ulaşbaba Caddesi, No:28, Selçuklu / KONYA

Tel :0 (332) 236 32 90

Faks :0 (332) 236 46 91

Web :www.mevka.org.tr

E-mail:bilgi@mevka.org.tr



**Karaman Investment Support Office of Mevlana Development Agency**

Adress:Ahi Osman Mahallesi, Ýmet Paþa Caddesi, No:2 Daire:3, Merkez / KARAMAN

Tel :0 (338) 213 00 20-213 00 30

Faks :0 (338) 214 02 30

E-mail:karamanydo@mevka.org.tr

**Union of Stud Animal Growers of Karaman**

Adress:Ahi Hamidiye Mahallesi, Dr Aziz Tarhan Caddesi, 375. Sokak, No:1, Merkez / KARAMAN

Tel :0 (338) 214 09 59

Faks :0 (338) 214 09 59

Web :http://karamandsyb.org.tr/

**Union of Bee Growers of Karaman**

Adress: Seki epme Mahallesi, Bekir SýtkýErdođan Caddesi, No:15/A, Merkez / KARAMAN

Tel : 0 (338) 214 20 40

Faks : 0 (338) 214 20 40

**Union of Stud Sheep and Goat Growers of Karaman**

Adress:Özel Ýdare Ýþ Haný, Kat:1 No:142, Merkez / KARAMAN

Tel :0 (338) 214 15 45

Faks :0 (338) 214 15 45

Web :http://karaman.turkiyekoyunkeci.org/

**Union of Milk Producers of Karaman**

Adress:Kiripi Mahallesi, Türk Dili Meydaný, No:79 Kat:4, Daire:34 Merkez / KARAMAN

Tel :0 (338) 213 1320

Faks :0 (338) 213 1320

Web :http://www.karamansut.org/

E-mail:iletisim@karamansut.org

**Karaman Agriculture Room**

Adress:Cumhuriyet Mahallesi, 703. Sokak, No:5, Merkez / KARAMAN

Tel :0 (338) 213 33 97

Faks :0 (338) 213 57 67

Web :http://karamanziraatodasi.org.tr/



**TMMOB Agricultural Engineering Room**

Adress:Karanfil Sokak, 28/18, Kızılay / ANKARA

Tel :444 1 966

Faks :0 (312) 418 51 98

Web :http://www.zmo.org.tr/

E-mail :zmo@zmo.org.tr

**Karaman Veterinary Room**

Adress:Tahsin Ünal Mahallesi, 27. Sokak, No:13 D:1, Merkez / KARAMAN

Tel :0 (338) 212 12 70

**Union Center of Cooperatives of Agricultural Credits**

Adress:YukarıBahçelievler Mahallesi, Wilhelm Thomsen Caddesi, No:7, Çankaya / ANKARA

Tel :0 (312) 216 40 00

Web :http://www.tarimkredi.org.tr/

**Department of Working and İşkur of Karaman**

Adress:Hamidiye Mahallesi, Atatürk Bulvarı, Erdural İş Merkezi, Kat:1 Merkez / KARAMAN

Tel :0 (338) 212 31 36

Web :karaman@iskur.gov.tr

**Karaman Business Room**

Adress:Yunus Kent Mahallesi, Alparslan Türkeş Bulvarı, No:2, Merkez / KARAMAN

Tel :0 (338) 213 10 21

Faks :0 (338) 213 00 67

Web :karamantso@tobb.org.tr

**Karaman Commodity Exchange**

Adress:Hasan Özkaymak Buğday Pazarı, No:2, Merkez / KARAMAN

Tel :0 (338) 213 37 69

Faks :0 (338) 213 58 92

Web :karamantb@tobb.org.tr

**KOSGEB Karaman Service Center**

Adress:Karaman Organize Sanayi Bölgesi, 1.Cadde No:12, Merkez / KARAMAN

Tel :0 (338) 224 14 61

Faks :0 (338) 224 10 64

Web :karaman@kosgeb.gov.tr



## PROGRAM AND PROJECTS CONDUCTED IN KARAMAN

### PROJECTS RUN BY SUPPORTS FROM EU AND MDU

Sixteen projects with 1.269.483 TL budget were conducted between 2006 and 2013. These projects were supported by EU Education and Youth, EU Regional Development and Mevlana Development Agencies collaboration with the Department of Food, Agriculture and Livestock of Karaman.

### PROJECTS SUPPORTED BY MINISTRY OF DEVELOPMENT AND FAO

**Rural Development Project of Göksu and Taşeli Basin:** This Project is supported by the Ministry of Development with 10.000.000 Euro budget in 2013 and started in 2014. The Project aims to improve socio-economic status of villages, to solve infrastructure problems, to enrich crop patterns and to stop migration. The projects contains 47 villages in Göksu Valley and Başyayla, Ermenek and Sarıveliler regions.

**Project of Sustainable Land Management and Environment-friendly Agriculture:** The Project was supported by GEF Agency with 21.300.000 \$ budget and will be conducted between 2012 and 2016. It aims to save biological diversity, to increase farm profits and forest productivity and to spread low-carbon technologies along with climatic changes. The Project contains nine villages from the Central District and 13 villages from Ayrancı.

### PROJECTS SUPPORTED BY CITY PROVINCIAL ADMINISTRATION

Eight projects were started with 443.000 TL Grant given by the City Provincial Administration in 2013. In addition nine projects supported by the Department of Food, Agriculture and Livestock of Karaman. For these projects, 430.432 TL were obtained from the City Provincial Administration and farmers contributed 386.385 TL, so totally 817.817 TL were spent.



## PROJECTS PLANNING TO CONDUCT IN KARAMAN

Projects planning to be conducted in Karaman in accordance with KOP action plan

Type of Project	Responsible Organization	Starting-Finishing Date
Integrated Horticulture Project in Rural Mountainous Areas	KOP BKİ	2014-2018
Organic Agriculture Applications in Rural Mountainous Areas in the KOP Region	Ministry of Food, Agriculture and Livestock	2014-2018
Spreading Organic Agriculture	Ministry of Food, Agriculture and Livestock	2014-2018
Establishment of Virtual Institute of Organic Agriculture in the KOP Region	KOP BKİ	2014-2015
Production of Vegetable Seedling and Vegetables in High Plastic Tunnel	Ministry of Food, Agriculture and Livestock	2014-2018
Increasing Added Value of Plant Production in the KOP Region	Ministry of Food, Agriculture and Livestock	2014-2018
Increasing Yield and Quality in Crop Production in the KOP Region	KOP BKİ	2014-2018
Investigations for obtaining crude feed for animals grown in the region	Ministry of Food, Agriculture and Livestock	2014-2017
Pasture improvement studies and establishing model pastures	Ministry of Food, Agriculture and Livestock	2014-2018
Improvement of grasslands	Ministry of Food, Agriculture and Livestock	2014-2018
Supporting production of feed crops	Ministry of Food, Agriculture and Livestock	2014-2018
Supporting small cattle investments		2014-2018
Education projects in KOP cities	KOP BKİ	2014-2018
Rural Development Project of Göksu and Taşeli Basin	Ministry of Food, Agriculture and Livestock	2014-2018
Land Gathering and Field Development Projects	General Administration of Agricultural Reform	2014-2018
Preservin Soil in Dry and Irrigated Agriculture, and Increasing Seed Vigor	Ministry of Food, Agriculture and Livestock	2014-2018
Field Irrigation Systems	Ministry of Food, Agriculture and Livestock	2014-2018



## CONCLUSION

The first condition for being successful in agricultural production is the sustainable use of soil and water resources and the establishment of a crop pattern with high yield and quality under climatic conditions of the region. Second, it is required to make necessary investments for processing and marketing of agricultural products. In recent years, especially, important developments have been realized in the control of product quality and standards based on trade and health issues. Product standards and quality are not as important as for prices but it is also important for obtaining high quality raw materials for agricultural industry. It will be more strategic to invest in the areas in which the region is strong and to establish brand values for the products. This causes an increase in export.

Apple is the most attractive product in the region. Cereal production follows apple. The region has good climatic conditions for high yielding and quality productions for both groups of crop species. Big investments have been made for apple production and investing for other fruit species could make Karaman a strong fruit production center. Especially, enterprises for servicing in new pruning and production techniques could be good investment areas in the region.

Karaman is one of the most important producers of biscuit and bulgur depending upon cereal production. One third of biscuit and one fifth of bulgur production of Turkey have been obtained from Karaman alone. Therefore, increasing the production of high quality cereals will provide an important added value. That is why breeding high yielding and quality cereal species is very important and introduction of new cultivars to farmers has critical importance. In this respect, it is also important to make investments in seed technology. Vegetable and industrial crops seed production have also become important in Karaman due to its wide lands and good climatic conditions.

The most important entities of agriculture are soil and water. Investments for saving soil and water resources are also important and strategic for Karaman. There is a serious need of investment made for increasing organic matter contents and yield potential of soils in Karaman. For this purpose, it is important to inform farmers about this issue, crop rotation patterns and the conscious use of agricultural equipments and machines. Irrigation can increase yield two-three fold. Underground water is usually used in irrigation in Karaman and increase of drought risk each day makes irrigation systems more important. Investments made for pressured irrigation systems have been becoming important for the agricultural future of Karaman. Moreover, organic agriculture and rural development projects are also important investment areas which should be taken into consideration seriously. For both subjects, Karaman seems an ideal settled area with its good climatic conditions, product richness and social-economic patterns.



Animal products have an important place in a healthy diet. Animal husbandry is also an important indicator for determining countries development status. Animal products is the basis of protein oriented diet. Karaman is brand city in sheep husbandry with its local sheep races and good climatic conditions for sheep growing. In recent years, great cattle husbandry has also become an important production area. Great cattle growing has important effect on meat and milk products. Karaman has a big milk processing potential and it provides most of its milk need from neighbour cities. Therefore, investments can be made in this area and may be very profitable. Great cattle husbandry makes feed crop production, improvement of pastures and animal fertilizers more important. Private corporations servicing animal producers would have good investment opportunities in Karaman. Due to lack of poultry slaughterhouse, poultry growing for meat are not practised in Karaman although egg chicken growing is a relatively good condition. One other investment opportunity in Karaman is organic honey and chicken production.

Agricultural marketing is as important as agricultural production and quality. Being a brand for a city provides advantages in marketing products produced in that city. For succeeding, it is important to introduce traditional values of the city and having good quality production. The best advertisement is the customer's satisfaction. For better marketing, it may be advised that branding efforts should be worked on; packaging facilities should be established; number of producer unions and their activities must be increased; specialized product stock-exchanges must be established; necessary investments for licensed storages, e-marketing and conservation after harvest must be made. All these could increase Exchange rate of agricultural products. Energy is the most important entity of this century and Karaman has a very important potential of energy sources and this makes Karaman a very important investment place. Karaman is one of the richest cities of Turkey in terms of fossil and renewable energy resources. Important investments will likely be made in the city in near future.



